96 PAGES

Reader's Digest

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EIGHTH YEAR OF PUBLICATION

DECEMBER, 1929

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The Bookman's Monthly Score

From The Bookman (November, '29)

A list of books most in demand in public libraries, compiled by Frank Parker Stockbridge, life member of the American Library Association, in cooperation with the Public Libraries of America.

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2. The Art of Thinking	*Ernest Dimnet*	SIMON & SCHUSTER
3. A Preface to Morals*	*Walter Lippmann*	MACMILLAN
4. The Mansions of Philosophy*	*Will Durant*	SIMON & SCHUSTER
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6. Elizabeth and Essex	*Lytton Strachey*	HARCOURT, BRACE
7. Mid-Channel*	*Ludwig Lewisohn*	HARPERS
8. Salt Water Taffy*	*Corey Ford*	PUTNAM
9. John Brown's Body	*Stephen Vincent Benét*	DOUBLEDAY, DORAN
10. Rasputin	*René Fülop-Miller*	VIKING
11. Hows and Whys of Human Behavior	*George A. Dorsey*	HARPERS
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6. Dark Hester	*Anne Douglas Sedgwick*	HOUGHTON, MIFFLIN
7. The Bishop Murder Case	*S. S. Van Dine*	SCRIBNER'S
8. The Galaxy*	*Susan Ertz*	APPLETON
9. Six Mrs. Greenes*	*Lorna Rea*	HARPERS
10. The Listening Post*	*G. S. Richmond*	DOUBLEDAY, DORAN
11. Blair's Attic*	*Joseph C. Lincoln and Freeman Lincoln*	COWARD-McCANN
12. Young Mrs. Greeley*	*Booth Tarkington*	DOUBLEDAY, DORAN

*This title did not appear in the Monthly score given in our *October* issue.

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Eighth Year DECEMBER 1929 Vol. 8, No. 92

The Menace of Million-Dollar Football

Condensed from Hearst's International-Cosmopolitan (November, '29)

William H. Taft (As Reported by Frazier Hunt)

Former President, now Chief Justice of the Supreme Court of the United States

AS a man grows old and theoretically wise he feels like using some profanity at the misconception of life that so many of our young people gain out of their college experiences.

"They do not seem to appreciate at all the great chance for education that is given them, but instead are carried away by the lure of college athletics and other 'extra-curricular' activities.

"Today, the emphasis in college life is radically and fundamentally wrong. Scholarship has been pushed aside and dwarfed by a super-importance that has been given to athletics.

"My deep concern is the danger that in the student's mind a college education no longer means scholarship. In his conception it means success and attainment in other things, mainly athletics and the social side of student life.

"Scholarship has seemed definitely to assume a secondary place. In most of our colleges and universities the winning of an athletic letter is regarded as more important than the winning of a Phi Beta Kappa key.

"After all, what is the true purpose of education? I take it that it is the preparation of the student for the duties of life, of citizenship. This seems to be forgotten in the modern college.

"Everyone sincerely interested in educational problems and the future of our country feels deeply this overemphasis of athletics and other outside, noneducational ac-

tivities, and all are agreed that this condition constitutes a menace to our whole educational system.

"Most of our great universities and colleges today have professional athletic business managers, trained publicity agents, high-priced coaches and, I am told, million-dollar football seasons. *There is a definite professional side to all this that is not in keeping with educational ideals and purposes. The stadium overshadows the classroom.*

"College alumni are by no means free from their share of the blame that is attached to this condition. The Old Grad wants a winning football team, and his overemphasis of the importance of athletics makes a willing disciple of the undergraduate.

"Let me state again that this is the real seriousness of the situation; the cheers and drama and color of athletics have so outweighed scholarship as to create in the mind of the average undergraduate a misconception of the purpose of education.

"We should remember that it is not the successful athlete who is most successful in after-life. Tradition to the contrary, the better student becomes the better and the more successful citizen. The average undergraduate's view of the true purpose of education must be revised; scholarship must again take its place as the true goal of college life. Athletics must be given in college life something of the relative value that they hold in the life of the average citizen."

Football now is in big business. Last year Yale went over the top with a million-dollar season — and a net profit from football alone of $543,084.76.

Harvard, with a much smaller stadium, made $420,787 from her big-business football.

Princeton's net profit last year was $298,880.

In the Middle West, Michigan did $624,407 gross business with a net profit of $415,328.

By and large it was a great season — *with gross gate receipts of over $50,000,000.* — Cosmopolitan.

Express Yourself!

Condensed from The Red Book (November, '29)

Alfred E. Smith
Four times Governor of New York

THE average legislator, I have no doubt, votes on laws in accordance with his own conscience. The trouble lies in the fact that the great mass of people whom he represents evince no interest in government, and the solution of a given question is usually made for a legislator by the party managers. I know a great many members of the legislature who were not only willing but anxious to vote for some of the constructive reforms I recommended, but who told me frankly that they were held in line by their party leaders. For the very simple reason that the people paid no attention to them, they did not seem to pay much attention to the people who selected them to represent them.

Lack of interest in public questions on the part of his constituency is a strong incentive to the average legislator to follow the wishes of his party leaders, because the silence of the represented group is a clear indication to the legislator that they are not interested, and that either way he votes is satisfactory to them.

In 1925 a desperate effort was made to prevent a reduction in the income tax. The legislative leaders attempted to add entirely unnecessary items to the appropriation bills, in amounts and for purposes not required for the proper management of the business of the State. After assembling all the necessary facts, on a Saturday night in March I spoke to the people of the State over the radio. At the close of my talk I suggested that people desirous of securing a reduction in their income tax address a communication to their senator and assemblyman. In their spare hours on Sunday they followed my advice to such an extent that wagonloads of mail were delivered all day Monday to both the senate and the assembly, and the pressure of public opinion, intelligently exerted by the rank and file of the people, brought the majority of the legislature into line, and tax reduction for a second time was an accomplished fact.

Most people never think of communicating with their representatives while legislation is pending. People interested in a governmental reform often write to the governor about it, although he may have previously expressed himself in favor of it, in fact

recommended it in his message to the legislature, but they do not seem to think of writing to the senator or the assemblyman who has the first say as to whether or not the law is to be enacted.

These letters help the governor to form his estimate of public opinion. Sometimes the correspondence comes from people who have given a subject a great deal of thought and whose analysis proves very useful. Such correspondence played a large part, for example, in the passage of the constitutional amendments reorganizing the State government.

Yet I am certain that it never occurs to the writers of these letters even to send to their legislators a copy of the letter they sent to the governor with a request that they coöperate with the governor or initiate some such movement on their own behalf in the body of which they are a member.

It is very strange to find, after long experience with the government of a State, that countless thousands of people believe that there is nothing more to the government than the governor himself. Ours is a government of laws and not of men. The governor can do only what he is empowered to do by law. Consider, for instance, the governor's annual message: It contains suggestions that can only be carried out by law. How many people after they read the governor's message and approve of it, either in whole or in part, take the trouble to write to their direct representative with a suggestion that he coöperate with the governor in enacting the suggestions into laws? Times out of number I sent messages to the legislature about the condition of our prisons and our hospitals and other of our public institutions. I received many thousands of letters commending my stand and wishing me success in my endeavors for betterment. How many would write to the assemblyman or the senator who must, before the governor can do a single thing to bring about the reform, pass upon it in the form of a bill that has to become law?

Who would employ an agent to represent him without knowing his name and address? Strange to say, hundreds of thousands of people in this State today not only do not know the address of their representative, but they do not even know his name. Very often when I have in public speech or over the radio suggested that the people write to their senators and assemblymen, my secretary would receive bundles of letters from people asking to be informed who their senator was and where he could be found!

Here we have hundreds of thousands of people employing a man to represent them. They

make the selection themselves, pay him a salary — and do not know who he is and do not even know where he lives.

Legislators are sensitive and responsive to public opinion. They must be, because they must frequently present themselves to their constituency if they are to continue in the public service. They read the home-town newspapers as well as the great metropolitan dailies, and they are strongly influenced by the amount of space a given piece of legislation occupies in the news-columns, and by editorial comment on it as well. The modern newspaper with its staff of trained investigators, and keen and intelligent political writers, has if anything strengthened its position as an organ expressive of public opinion. I have seen many proposed pieces of legislation die stillborn after editorial discussion in the news-columns of powerful and important newspapers. Party leaders are often unable to hold individual legislators in check in the face of widespread editorial criticism of a pending measure.

Interest in what is going on in the affairs of a State is absolutely essential if progress is to be made in government commensurate with the material progress of the last quarter of a century in practically every other line of human endeavor. Democratic representative government will not be truly effective until the rank and file of the people themselves take an all-year-round interest in their government, watch the records of their representatives, have no hesitancy in writing to them asking for reasons for their attitude when it does not conform with their ideas, and treating them as they would any other paid representative engaged in the business of looking after their interests.

FOR THE BLIND

THE READER'S DIGEST is the only ink-print periodical issued in its entirety in Braille. Each Braille copy is a clothbound book, approximately 11 inches square in size, and 2 inches thick. It is sold at actual cost of production, $2.00 for a single copy or $20 a year (plus carriage charges), by the American Printing House for the Blind, Louisville, Kentucky.

Let Us Risk Peace

Excerpts from an address by the Rt. Hon. J. Ramsay MacDonald, Prime Minister of Great Britain, before the Council on Foreign Relations in New York on October 11, 1929

The full address, together with an introduction by Elihu Root, has been reprinted as a supplement to the October issue of Foreign Affairs. Copies may be had, at 50 cents each, by addressing Foreign Affairs, 25 West 43rd Street, New York

PEOPLE fight because a train of circumstances has happened which puts their nerves on edge, which makes them feel unsafe and insecure — until, by a continuation of that mentality, they come to the conclusion, "For God's sake, let us end it, whatever the price." And before we know where we are, we are at war.

There is no better way to prevent the development of that national frame of mind than to prevent competition in armaments, because by competing in armaments every nation knows that it has failed to get security. And when it has spent its national income, when it has frayed its nerves, then it knows that war is absolutely inevitable, and that there is no cure for the conditions into which it has landed itself except the conflict of arms. Limit the development of arms, and what do you do? You compel your statesmen, you compel yourselves, to trust to political security, the security of justice, the security of fair play, the security of rightness of position, the securing of arbitration. Every agreement made subsequently between nations to stop threatening each other by competitive development of arms means that those nations are driven more and more into the judicial frame of mind, into the frame of mind which finds security in mutual conference and in mutual good will.

The mind, however, is furnished always with old furniture and it is very difficult for you to furnish it afresh as you do your rooms in your houses. For instance, in our case, our navy is the very life of our nation. We have a romance surrounding it. We are people of the sea. Europe is at our doors, for good or for ill. A month's blockade, effectively carried out, would starve us. Great Britain's navy is Great Britain itself.

Ah, my American friends, I hope that your imaginations will enable you to see how hard it is to get the British people to feel security if the naval arm is limited in any way whatever. I put that in front of you, not as a final word, but as a plea for understanding, a plea for pa-

tience, a plea for good will. In that way, the very fact that you show that patience and that good will will enable us to change that part of the furniture of our mind and put in its place more modern, fairer, and more substantial furniture for future use.

There is another difficulty. You know in this world there is the wise man. As a rule he is a very unwise man. And a very characteristic type of wise man is he who says that as you have never accomplished anything in certain directions, so you never will. He is the sort of man who, an hour before Bleriot flew the Channel, would declare the Channel could never be flown because at various times it had been unsuccessfully attempted. That type of man comes in to bother us at the present time. He tells us, for example, that in 1815 the Holy Alliance was formed for the purpose of securing the world forever in peace. He tells you how the Holy Alliance came to an end, he tells you how instead of armies vanishing, armies grew.

The fact of the matter is, that if you take any great human cause that has triumphed for the benefit of the world, you will find that originally it comes down from the clear blue sky of idealism, down, down, down through experiment after experiment that has failed, until at last it touches the earth, and as soon as it touches the earth, by almost a magical transformation of its creative power, it begins to grow up and up and up, by physical means and by successful action, until at last it establishes itself as one of the great achievements of the human intelligence and the human will.

There has never been anything worth doing that has not been dreamt of first of all. Nobody has ever established a successful business without dreaming about it at the beginning. Never has there been a glorious cathedral built, but an architect came first of all and conceived the outlines of its beauties and put them on paper.

Public opinion in Europe is demanding that those responsible for governments should not only take the risk of war, which they take when they build competitively their armaments, but they should take the risk of peace. Public opinion in Europe today tells its political leaders that it knows there are risks in peace; that it knows that the assumption made between one nation and another that they are to conduct their affairs in sincerity and in justice, does lay the believing nation open to a certain amount of risk. I will take it. I will take it!

Were I to refuse to take that risk, were I to turn my eyes across the Atlantic to your building, as I have not done and decline to do, were I to build ship after

ship in response to your building, the risk that I should be taking would be the risk of war.

If, on the other hand, I take the risk of believing in your word, if I take the risk of believing in your continued friendship, if I take the risk of assuming that you are men of your word, that you are a nation of honor, and that your honor consists largely in fulfilling your obligations, what risk am I taking? I am taking a risk of peace which is temporary, and in the end I will get peace, securely, certainly, and a continuing peace to boot.

You signed the Pact of Peace; we signed it. And those people who are always telling us that there are certain things that must be withheld from arbitration, place their finger upon the foremost of those things when they say "national honor." I agree. National honor is a sort of thing that is not in the nature of an arbitrable affair. I agree. But we have both signed that Pact. How can anyone talk about national honor and yet contemplate the cancelling of their signature to a Pact just when it suits them?

National honor prevents the United States and Great Britain and the other 50 nations that have signed that Pact from ever contemplating arms as an element in their national policy. And I propose so long as this Government is in office, it will always regard its signature to the Pact of Peace as a precious and sacred part of our national honor, and will observe it.

At Geneva, the other day, Great Britain and its Dominions pledged ourselves to refer all those questions that have hitherto developed into wars to a judicial court sitting at The Hague. We have nothing to fear. If we are right we will win our case. If we are wrong, we don't deserve to win our case. And when people talk about little, pettifogging things, and point out how now and again the most judicial of benches make mistakes, I know that is true. But balance the mistakes on the one hand, and put against them the losses, the destruction, the criminality of war, and where does the balance lie? Human mistakes may be hard to bear by the victim of the mistakes, but the sort of thing that has been going on, century after century, under the false impression that any nation can get security from military force, altogether outbalances the evils of human mistakes. If God made us imperfect, as apparently He has done, I accept the imperfection of human good will, rather than the certain destruction and criminality of human malice and wickedness as expressed in war.

War, Perfect War

Condensed from Collier's Magazine (October 19, '29)

William G. Shepherd

Famous War Correspondent; Feature writer for Collier's

JOSEPH JONES, war correspondent of the vintage of 1918, went forth recently to see for himself what kind of war the next war would be.

First he went to the artillery fortress of Sandy Hook. Standing with the commanding officer on a half-moon circle of cement, 30 feet thick, his gaze swept the Atlantic. Just behind him, sunk down, was a vast piece of machinery known as a 12-inch disappearing gun. You know the kind. It rises majestically on steel grasshopper legs, belches out a cloud of black smoke as big as a Kansas cyclone, and then settles back into its cement nest. Cost, $120,000.

The coast artillery officer was giving him a lesson in big gun arithmetic. He gave some figures and concluded, "The answer, in feet, tells you how far your target is below the horizon."

"Below the horizon!"

"Why, yes. Our new guns carry so far that we must fire at them over the curve of the earth."

"But is that curve big enough for a battleship to hide behind?" asked Jones.

"Well, our guns will throw a one-ton shell 25 miles. A target at 25 miles would be 416 feet below the horizon. A battleship's crow's nest is 135 feet above the surface. Why, these battleships can't see each other's masts at a distance of 14 miles. And yet, in a naval engagement, they must hit each other at that distance, shooting over the shoulder of the earth. That's one reason why airplanes are indispensable in the navy."

The officer next took Jones down into the cement depths of the fortifications to a room that looked like a draftsman's workshop.

"Here is where we aim. We get facts, by telephone or radio, make our calculations down here, telephone the gunners where to set their gun and exactly when to fire."

All this time Jones was becoming uneasy. He had learned a good deal about guns in the war, but he was feeling behind the times. "That's an astonishing lot of big guns," he said as they came up to the air again, waving a cane generally at the cement-protected giants. The officer gave him a look of pity.

"Why, those aren't the guns I'm talking about," he said. "Those guns —" (the 12-inch

disappearing giants) "are as old-fashioned as bicycle bloomers."

And then he took Jones out into the woods of Sandy Hook and showed him even huger giants, standing on great flat surfaces of cement. Poison gas would be less likely here to suffocate the gun crew than in the sunken nests.

"These are the 25-mile guns," said the officer, "the newest thing. You can point them almost straight up into the sky."

Right then and there Joseph knew he was a war dodo. And he decided to find out, by going from office to office in the War Department, and from army post to army post, what has been done since 1918.

Old-time generals used to say, "Trust in God, but keep your powder dry." A new waterproof powder has thrown that old motto into the discard. Still, what Sherman said about war is righter than ever. Major General Williams, Chief of Ordnance, outlined a few modern tools of war as follows:

"Guns varying in diameter of bore from one-third inch to 16 inches; ammunition with projectiles and fuses so sensitive as to explode upon impact with the fabric of a dirigible or so inert as to penetrate heavy ship's armor and then explode; powder that will explode in a gun without showing any flash at the muzzle; bombs varying from a few pounds to two tons and so designed as to explode when they strike water, land, houses or ships, as the special need requires; gases that make you sneeze, laugh, cry, blister, or die; tanks that need no roads, can bowl over trees, some that can even swim; and finally, aircraft with their tremendous possibilities."

The buck private's rifle of the Great War will be as old-fashioned as that favorite weapon of the Chinese private a thousand years ago, the stinkpot. In the recent war a good rifleman could get rid of ten shots a minute effectively. But in the next war! Every private a machine gunner; that's the idea!

That deadly little machine gun which you hear of bandits using is one of the types which will be in the hands of privates. Each man is turned into a killing machine, ten times more deadly than any private has ever been before, firing 100 shots a minute.

Mr. Jones knew that in the last war not one ounce of poison gas was dropped by airplanes on either side. The consequences would have been too terrible. Either side *might* have dropped poison gas from airplanes, but neither side was able to protect its troops from gas from the sky. Wherefore no one dared to start the practice. But each side was ready to follow suit if the other side began.

There isn't a war department in the world — and that includes our own — that will admit it is prepared to combine the airplane and the gas bomb, if need be, in whatever war it may find itself engaged. "That is one subject that simply is not discussed," a leading military man in Washington said.

But the man in the airplane — no matter what he's dropping — won't have an easy time in the next war. A man turns a range finder on an oncoming plane. Just so long as he can see the plane through this finder, a battery of four electrically aimed guns can throw 72 explosive shells a minute within the plane's area, as high as any plane has ever yet flown. At night, a new sound-finder will automatically train a great lamp, unlit, on the plane. Switch on the rays. Up there, in the sky, they will unfailingly strike against the sides of the night flyer. Then, with the range finder, the plane can be fired on as accurately as in daylight.

"Battles in the next war will be something like sea fights." That's one note Jones put down.

He discovered that miracles have been wrought in tanks. One of the perfected tanks, with its greater speed, power, and endurance, will do the work of 80 tanks in the Great War. In the old tanks, firing with good aim was impossible; the weapon lurched with the tank. Tank guns are now hung on springs. Plans are made to use thousands of two-man tanks as traveling machine-gun nests in the "better" war. Telephone linemen will no longer hoof it across battlefields under fire, laying wire. These tanks will reel out wire like a ship laying a cable.

Soldiers in the recent war advanced side by side in charges with the great, lumbering tanks. Next time they will have to go awheel to keep up. The time is here, in the plans of the American War Department and, incidentally, in the known war plans of the war departments of 27 other nations, when a considerable proportion of soldiers will ride to battle in armored transport cars.

"Brilliant darting speed," as Jones put it, "not steady plodding, will win the next war."

How a commander is to control troops so equipped is a problem that is being worked out. But one fact interested Jones, who was always baiting generals because they didn't climb down into front-line trenches: War won't be so safe for certain officers in the future. In this new naval-like warfare all officers will find it necessary to be right on the spot with their men.

Military men throughout the world are mechanizing war with desperate haste. "Mechaniza-

tion" is a term continually in every civilized war department on earth. It means organization to deliver a maximum of fire-power per man engaged.

An army behind a multitude of steel-armored land-going ships, moving under their own power on wheels, is something new in the world. Yet that is the plan everywhere. In England two of the smartest cavalry regiments have turned in their fine horses for armored cars and tanks. The French are said to be ready to build a 600-ton land tank. The Russians are credited with planning an 800-ton tank.

One inevitable result of these plans is this: "Good-by to trenches in warfare." When machine-gun nests come to you, you will get out of the way. No soldiers will stay in trenches when huge fleets of shooting, gas-throwing tanks come rolling along — as they most surely will if war breaks out again.

But it will not be a smooth land over which these battles between machines will be fought. The battle will be disturbed from the sky by airplanes. The same huge bombs that are dropped by airplanes, not on the decks but only in the water in the vicinity of great battleships, and put these ships out of action, will be dropped in land warfare.

There are airplane bombs that can quickly cover many square miles of fighting ground with holes so deep that the most agile tank will be unable to move over the terrain. The smallest of these bombs weighs only 100 pounds. But its explosion moves at least 60 tons of earth, leaving a hole seven feet deep and 22 feet across. Dot a tank battlefield with pockmarks like that and you bring tanks to a standstill.

As for our 4000-pound bomb, it would take four days for a crew of 25 men, with the latest model of steam shovel and a fleet of seven trucks, to move the soil that this monster shell can throw toward the sky.

Neither Joseph Jones nor this writer feels competent to describe with any degree of adequacy the noises, the fumes, the sights nor the general tumult and confusion in sky and on land of a battle in the next war. It'll take a new kind of war correspondent to do that. Maybe, instead of correspondents, they'll have radio announcers riding around in tanks, broadcasting the doings, instead of writing them down. That means that they'll be drawing on the concert stage instead of on newspaper offices for their supply of reporters.

And that would be no stranger than most of the other changes that are taking place during this mechanization of war.

The Unshackling of the Mind

Condensed from The New York Times Magazine (October 27, '29)

Sir Philip Gibbs
English Author, Journalist, and former War Correspondent

MOST of us are only dimly aware that we are living through a time of mental revolution. But future historians will look back to this period as a time of escape from the imprisonment of thought.

Looking back to the world before the war, it is even now astonishing to think how much most people were walled in by narrow enclosures of the mind. International intercourse was mainly conducted by an official class of Ambassadors whose work was based on espionage, social intrigue, and gossip. Foreign offices dealt with each other like poker players who must never show their cards.

And the ordinary people whose lives were at stake in this game had very little interest in world problems because they were profoundly ignorant of anything beyond their local affairs. In England just before the war I met the sexton of a country churchyard whose forefathers had worked on that spot since the 14th century. It never occurred to him that he might leave it — until one day a war came and he went as a soldier to Egypt and came home a changed man.

The war took millions of men beyond their garden walls. Englishmen went abroad. Americans crossed over to Europe. Australians came from their bush and Canadians from their ranches. It was the beginning of the great change. The imagination of mankind was shaken out of its old ruts.

The revolution about us is not social or political, like previous revolutions. It is happening in the imagination. It is an opening of doors in the human mind.

Few of us have actually made a flight in an airplane. But when Lindbergh flew the Atlantic he changed the imagination of the world. When the *Graf Zepplin* made its marvelous journey it altered the measurements of time and space. Every new record that is achieved in flight changes something in the mind of the city clerk, the business man, the laborer.

A few weeks ago I spent an afternoon at the airport of Berlin. Thousands of Berlin folk were there in the outdoor restaurants listening to a radio concert, drinking light beer, watching the scene in the great aerodrome below. Every 20 minutes or so, punctual to a big time-table, an

airplane arrived from some other country or set forth on a journey to far fields — in Switzerland, Poland, Italy. Passengers stepped out with their bags, other passengers departed. It was their adventure, but the spectators shared it in their minds. Time was changing its meaning. Distance was altering. The walled-in mind was escaping from its old confinement.

Some months ago I was talking with Sir Philip Sassoon, Under-Secretary for Air in Premier Baldwin's Government. He had just made an air survey of the British Empire — a round-the-world journey.

"What do you bring back from it?" I asked.

"A new mind," he answered. "It gives one entirely new conceptions of life. It's like Einstein's relativity. Time and space take on a different value. These little countries like Greece and Palestine — one hops over them! Their little quarrels, revolts, nationalities — how small they seem! The human family is getting closer together."

Since the war there has been a very definite advance toward frank and friendly intercourse between the nations. Gradually the League of Nations has created a real Parliament of mankind where 53 nations meet, not to deal with some terrific crisis, but as a matter of routine and yearly stock-taking of world problems. They have developed a new international mentality — reasonable, conciliatory, explanatory — which would have seemed beyond the possibilities of international statesmanship before the war.

We are looking over our garden walls for the first time. The result has been a network of treaties for arbitration and conciliation which may have begun with insincerity, but which have created a system of checks and balances likely to arrest any sudden outbreak of war. A stampede into war cannot happen again as it did in 1914.

The ease of communication and travel is the outstanding characteristic of the world's new line of progress. The American tourists who visit Europe annually may gain only superficial impressions of the countries they see. But the important point is that they have been taken out of their own surroundings and their minds have had an airing. Their outlook on life has widened.

The same effect is being produced by the motor car. The cheap car is a chariot of liberation for millions of people who once were mewed up in stuffy homes where it was an offense to peep through the blinds at a neighbor.

The moving picture, and now the talkie, are making the same kind of change in the mentality of mankind. True, the present intellectual banality of the screen

is often demoralizing. But it also brings before small-town folk the life of foreign cities, world events, even the voices of the world's great personalities.

The radio — cheap and shoddy as its program may be — is one of the greatest scientific discoveries in the history of mankind. When this discovery is controlled by high intelligence instead of by advertisers, the radio will be the means of communicating all that is fine and noble in human thought to every individual in the world. Even now it can be the poor man's university.

In many countries a new class of reader has arisen. It reads not only novels, but also books on science, philosophy, history, every branch of knowledge because — strange as it may seem — it wants to know. It wants to get closer to the riddle of life. It wants to come closer to truth. The novels that have the greatest vogue now are not the old-fashioned romances, but novels which reveal the problems of present-day living.

All these widening influences are flattening boundary walls, bringing the nations out on the high road together, with open vistas and an uncertain goal.

I cannot guess as to the ultimate result of all this. I am not at all sure that it is going to make us love each other any more. The big family is getting closer together, but most families have their squabbles and feuds, and contiguity is sometimes the cause of the worst friction. But I imagine that it will lead to broader territories of law and order for mutual welfare. It will lead to larger groupings. It will eliminate the jealousies of small states, or at least get them into bigger confederations. That idea of the United States of Europe may sound fantastic now. But something of the kind is bound to happen, because it is far more fantastic to continue the present boundaries, custom houses, passport regulations when they have become ridiculous.

We of the older generation do not know exactly what is in the mind of youth. But I believe the younger generation is ready to live dangerously and to go adventuring, unlike their fathers, who were prone to play for safety in the realm of ideas.

The mind of the world is moving fast, and 50 years from now it will be beyond our present imagination. There will be fewer divisions between races, and perhaps greater happiness and wisdom for the average man. Who knows?

Your School Was Never like This!

Excerpts from seven articles in Progressive Education (September, '29)

The authors are all identified with progressive schools

CREATIVE expression is the aim of progressive education. Teachers are content to stimulate and guide without dominating the output of the children. Suggestions are given, discussion and self-criticism invited, but the end product remains the expression of the child.

A first grade class which had closed its year with an ability to express itself in writing, promised to exchange letters among its membership during the summer. But in the fall, a check-up revealed that many of the letters had failed to reach their destinations because erroneously addressed. Out of this simple exchange of experiences, grew a project which occupied almost a term of a second grade, furnishing the reason for a vast amount of correspondence with the post office department, a study of the operations of the local post office, interviews with its manager, carriers, clerks and others; a study of the various services and their costs; a study of methods of mail delivery including railroad, airplane, and steamship. It is not necessary to go into detail to illustrate all the written composition, reading, arithmetic, geography, history, art and handwork growing out of an activity of this type.

Children learn as the entire human race has learned; they should set out from the immediate and the concrete to discover the general, the abstract, and the remote. History and geography should begin with the family, the home, and the community, and thus lead into a study of other localities in relation to our own. Science should bloom out of the local flowers, spring from the neighboring rocks and brooks, and be deduced from the practical and the local industries. Arithmetic must solve the actual problems of daily life.

In one seventh grade, which built a coal mine with all the cranes, cars, and shafts run by electricity (boys brought their own meccanos, and transformers), months of arithmetic grew up, including computing distances, use of railroad routes, computing cost of transportation, population and areas of countries, price lists from coal merchants, all business arrangements and forms, and graphs and charts of all types.

A first grade which was inter-

ested in food, purchased fruit and vegetables from the farmers in the open-air markets, stored, dried and preserved these, and later cooked and served its own luncheon. One school has a Pet Park, in the center of which the children are building a cement fish-pond. A rabbit hutch, a sheepfold and hen coops are being constructed. As the work progresses the teacher gathers information on the care of the various animals and this is the basis of much reading and discussion. In one classroom a Promethea Moth emerged from her cocoon. Then a leopard frog held the interest of the class a few days; early wild flowers, new bird arrivals, and individual gardens engross the pupils' attention daily.

The fourth grade's interest in natural phenomena provides varied nature experiences. There are light and ball demonstrations of earth movements, observatory trips to see the stars, outdoor star parties, beach, quarry, and Field Museum trips. Through these experiences and numerous discussions, many questions are cleared regarding the things children have "always wanted to know."

In one third grade the children have been making boats, and have studied the history and construction of boats to an extent that would surprise many a college graduate. Literature plays a part in this program, for the children find many poems and interesting stories about the sea.

A fifth grade has combined its study of geography, history, English, penmanship, spelling and composition in an intensive study of lumbering which has been carried on for several months. This in turn leads into the study of water and conservation.

One third grade class studying Holland exchanged pictures, photographs, cards, original booklets and stories and legends, corresponding for two years with a group of Dutch children.

A Christmas pageant by one school grew up through each grade's giving a typical Christmas scene from the country it was studying at the time, costumes, scenery and play being made by the children.

Egyptian life with its people, customs, industries, beliefs and arts crowds the time with interesting things to do. One group built a city of Thebes with the river Nile, a palace, a temple, and a market-place. Another group dramatized the story of Joseph and his brethren, making their play, their costumes and their scenery. Another grade played at living an Egyptian day, having a scribe school and an Egyptian feast.

The supplies for Byrd's South

Polar expedition were loaded at the Norfolk naval base. One morning a number of Norfolk third grade children came to class greatly excited over the Eskimo dogs that were going on the antarctic trip. The teacher decided to direct their interest further. The result has been a unit of work, which was unusually valuable because it had immediate interest for the children and unified practically the whole curriculum of this grade for the entire term in a natural way.

First, the group found out what they could about Commander Byrd. They discovered that he is a descendant of the founder of Richmond. They discussed the traits of character that made Commander Byrd worthy of leading the expedition. To explain the location of the South Pole and the route of travel, the children made their own map. Icebergs, ships, sleds, dogs, tents, houses and men made the model come alive to the children. As they worked, they wrote descriptions of their activities as imaginary explorers.

The provisions made for these modern explorers were compared with the privations encountered by the early discoverers of America. The settlements at Jamestown and Plymouth were contrasted with Byrd's object in exploring the antarctic region. The bulletin board was used for pictures and clippings, which have never ceased to appear as the progress of the explorers is reported. The class chose their best compositions and clippings to make an illustrated book "Traveling with Byrd to the South Pole."

A fourth grade child has little understanding of the great world industries, or appreciation of the meanings of these things in his life. With this in mind a teacher in Norfolk tried to develop in the children an understanding of what the coal industry meant through their interest in coal exporting as the chief industry of Norfolk.

The concrete results of this activity were a model of a typical coal mining village and a book on the coal industry. Trips were made to coal piers to see vessels loaded with coal and to the local gas plant. People who had had real experience in mines talked to the class and made vivid to them the lives and work of the miners. Oral and written reports were given by the pupils.

The effort of progressive educators is to make school activities increasingly genuine and vital to each individual child; to prepare each child better for his social obligation; and to offer increasing development for that greatest treasure, creative ability. Our schools must be reorganized in terms of child-life.

Taming of the Shrews

Condensed from The Mentor (November, '29)

Fairfax Downey

New York journalist; author of "When We Were Rather Older" and "Young Enough to Know Better"

A SHOUTING, jeering crowd jostles through the principal street of a pleasant English village in the year 1655. They make a procession at the heels of two figures, one, an officer, leading the other by a chain. The prisoner, by her clothes, is a woman — not much can be seen of her head, for it is enclosed by an iron harness. Though the crowd hoots and reviles her and she is renowned for her sharp and ready tongue, she utters no word.

The chain by which she is led is attached to an iron collar around her neck. From this a hinged crosspiece curves vertically up over the middle of her face, passing over her head and locking to the collar at the nape of her neck. Her nose protrudes through an opening in this iron strip and from its interior surface an iron tongue juts out and has been forced into her mouth. It holds her tongue so that she cannot possibly speak. She is most effectively muzzled.

Such was the brank, the gossip's bridle, the scold's helm. In its mildest form it was cruel; in its most severe it was torture. The gagging tongue was not always smooth and flat but might be pointed and sharp-edged or spiked like the *poire d'angoise* — the pear of agony which expanded on springs when thrust into the mouths of the prisoners in France.

Branks were in wide use in England — 50 of them survive as museum pieces. Freedom of speech was considered decidedly not feminine. And it was often kept in mind that the "curste queane" might be a witch whom prompt treatment with the brank would prevent from muttering some malevolent incantation wreaking any amount of evil on the community.

The brank was employed in England as late as 1824. The mere display of it was enough to subdue an unquiet woman in 1858. While it was used in France it never crossed the Atlantic. In the Colonies the authorities favored a simpler device to cause "termagants" to hold their tongues — a cleft stick. There are many historical references to this punishment being imposed for "swearinge, railinge and revilinge."

Men did not escape the brank and the stick as a punishment for

lying, blasphemy and slander. The latest victims of the cleft stick were talkative school children, who, on into the past century, paid sorely for noise in class.

Still it was the ducking stool which was regarded as the shrew-tamer par excellence. Benjamin West hymned the ducking stool in 1780, suggesting that one immersion might fail to do the trick:

> If so, my friend, pray let her take
> A second turn into the lake,
> And, rather than your patience lose,
> Thrice and again repeat the dose.
> No brawling wives, no furious wenches,
> No fire so hot but water quenches.

The ducking stools sometimes were decorated with carvings of devils seizing on scolds or of men and women bickering, which last recalls an instance of poetic justice when a quarrelsome married couple were ducked back to back.

The ducking stool was imported to America and used without stint, along with the tumbrel, which was a ducking stool mobile on wheels, so that if the regular ducking pool dried up the implement could be moved elsewhere without delay. The dame with the turbulent tongue, rich or poor, married or single, was haled off to the pond, bound in the seat on the end of the seesaw-like plank and submerged for a half-minute or so.

A companion piece to the ducking stool was the cucking stool. This was landbound and was simply a chair in which scolds were tied up for 24 hours usually and left to the mercy of the gibes of the mob.

Scolds were also restrained in bilboes, an iron bar to which the feet were shackled. Goody Gregory of Springfield was confined to the stocks in 1640 for telling a neighbor, "Before God I could break thy head." In the stang or skimmington riding, members of a community went to the homes of nagging women and mimicked them. Scolds and slander stirrers were not infrequently flogged, in Boston being dragged to the whipping post in a cage. One poor creature was thus condemned for exercising the gift of prophecy. Another Boston woman was condemned to stand for half an hour with her breast marked, "Public Destroyer of Peace." Excommunication was the penalty imposed on shrews by the ecclesiastical courts of London in the 17th century. It is of actual record that in 1614 a woman was thus punished for "misbehavying her tonge toward her mother-in-law."

Neither Church nor State spared their severities for more than 300 years. All manner of chastisements failing, man finally gave up his attempts to dull the keen edge of that sharpest of all weapons — a woman's tongue.

What Next in America?

Condensed from The North American Review (November, '29)

John J. Raskob

Capitalist; Executive of the General Motors Corporation; Chairman of the Democratic National Committee in 1928

THE five-day week has already made its appearance in the American industrial scene, and the future will see its universal adoption. It will be opposed by people whose sole economic idea is that workers must be driven as hard, as long and for as little return as they will stand. But that idea is a full century out of date. We have abandoned it partly because it offended moral sense, and partly because such a system proved to be very bad business.

The reason for proposing that industrial production be limited to the five-day week is to give the workers additional time and opportunity to function as consumers of what they produce. We have got production geared up to such speed and efficiency in this country that we are already faced with the problem of getting the goods we are making consumed. Every manufacturer knows this. Our sometimes frantic selling efforts and our elaborate science of advertising bear witness to the fact. Yet we could easily make half as much again as we are now making. We have to keep the production machinery throttled down.

The five-day week offers the way out. Machinery and tools are the only classes of goods which will not at once begin to be consumed more rapidly when we have an extra day of leisure. With a combined Saturday and Sunday off every week, there will be an immediate and tremendous increase in the use, which is to say in the consumption, of automobiles, tires, gasoline, oil — and roads. The effects of that increased consumption will flash like an electric impulse back to the factory, the iron mines, the glass works, the oil field and the cement mill. Among people who do not care to travel there will be increased demand for sports equipment — for golf, tennis, fishing, etc. Many people will prefer to "potter around" at home — in which case they will consume more lumber, paint, glass, nails, tools and so forth. Or they will read more magazines and newspapers and use their radio equipment more intensively. At the very lowest they will wear out their furniture faster!

There is another adjustment of our working schedules which I be-

lieve will come in the near future. This will be the celebration of all holidays except Christmas on Monday. Patriotism and sentiment would suffer no injury if the Fourth of July, Memorial Day, Columbus Day and other holidays were always celebrated on the nearest Monday; production would halt less than it does now when a holiday falls in the middle of the week; but consumption would be powerfully stimulated. With Saturday, Sunday and Monday ahead of them, people would really start out to do things.

To any question whether we could produce in five working days all we would be consuming in seven, the answer is twofold. In the first place I am firmly convinced — and so are others who have studied the matter — that the worker would probably produce not only as much, but more, in five days, even with only the present equipment. Looking forward to two days off every week, every ambitious worker would become more efficient. But, in addition, modern machinery, methods and power have already developed a vast margin of unused production capacity. America is in shape to produce in five days all she can consume in seven, with a lot left over for export. That being so, the five-day week should become the rule with as little delay as possible.

The fact is that we are getting into position, in this country, really to demonstrate how organized, civilized society can further the divine purpose that man should enjoy the earth and the fruits thereof.

In this connection I look forward to another social development — a device whereby the American worker may be guided to better investment of his money. He is receiving good wages and he is saving money. But when he tries to invest his money he is beset by the twin dangers of blue sky promotion on the one hand and unfamiliarity with the hazards of the legitimate stock market on the other hand. Workmen's savings represent a vast fund of capital which is not entering the arteries of production in the most efficient way.

Some of us believe that it ought to be a not too difficult matter to direct the flow of that great reservoir of capital along lines which will make it of more benefit to everybody. If all workers become participating owners of our industries by means of stockholdings, we shall become in fact a true industrial democracy. We shall arrive, if you please, at something like the goal of the Socialists, with this difference, that instead of a disastrous leveling of human beings, we shall preserve and utilize the advantages of exceptional ability, the qualities of leadership, to or-

ganize and guide the common industrial machine to the benefit of all.

I conceive it to be a simple, logical and necessary extension of the leadership function for those in a position to judge values and prospects, to help their partners, the workers, toward a more profitable investment of their money.

I deem it certain that a corporation will be organized to carry out this function. It may be along the lines of an investment trust, issuing its own securities against selected holdings, or it may serve chiefly by guiding the small investor in his selection of securities. It is an abominable blot on our civilization that today 75 percent of all men over the age of 65 are dependent. Pension plans have been found ineffective because they take money from the worker to invest in the lowest-yield securities. Workers need the opportunity to reap more fully the rewards and profits of American business.

I consider it entirely sound, at the point our industrial society has now reached, for the worker to invest a considerable portion of his income in common stocks. His greatest security is that American industry is going irresistibly ahead and that American prosperity will last and increase. We have had some years of it now and have found it so satisfying that no one is going to "upset the apple-cart." Leadership and guidance are all we need, and the worker can depend upon the industrial leaders guiding his investments in good faith just as he now depends upon the insurance men to guide him correctly in the selection of a policy, and for the same reason — that it is good business. It will be more than that, too, for some of our greatest captains of industry will derive the greatest satisfaction of their lives from serving their less affluent partners, the workingmen.

Today we find ourselves in possession of an almost miraculous mechanism for the production of desirable goods. We know that the mechanism has vast potentiality. It can produce enough for all. It needs further adjustment, however, toward increasing the worker's share of ownership and profits, and endowing him with more time to use and enjoy the products. If some of us who have what the world calls wealth can bring these things about, we may achieve some of the happiness which we envy when we see it in the faces of priests, nuns and ministers of the Gospel who walk with poverty on one side but God on the other, and in the faces of scientists who ask only the opportunity to track down truth, or poets and artists who ask only freedom to follow imagination to the shrine of beauty.

The Art of Table Conversation

Condensed from The Ladies' Home Journal (November, '29)

Abbé Ernest Dimnet

Author of "The Art of Thinking" and a dozen other volumes

IN many places and among many peoples, dining is strictly a matter of eating. Thus I have known old farmers in the north of France who never in their lives sat down to a meal. Eating meant food, that was all, and never conversation.

But do we think of food when, all tuxedoed and beautified, with pearls in our shirt fronts and a lady on our arm, we march down in solemn procession to the dining room? Or have we a premonitory thrill at the thought of one more experience in human commerce, and an accompanying warm sensation round our hearts? Is the display of silver, lace and flowers on the table an incentive to mere food, or is it, on the contrary, something to help us think away from food? And for what is there a table president, all smiles but still somewhat awe inspiring, if not to remind us of the real character of dinner?

Indeed, a dinner party is an assembly of men and women at their most civilized, and expecting from their two hours together the most exquisite enjoyment of their civilization. Habit, of course, wears out the consciousness of this refined aspect of a daily occurrence, but the least appearance of novelty can easily revive it. When we stand at a captain's table, the liner's first night out, it returns upon us with its full force; it is not the menu that is in our thoughts, but an expectation of something from fellow human beings. We never experience anything of the kind in the dining car, where dinner is only food, and when a friend invites us to the restaurant we do not expect half so much as if we had been invited to his home.

Most human beings may imagine that they are not intellectual; but they are often more discriminating conversationalists than they suppose. They know what a "clever thing" means, they remember some and quote them, and, secretly or openly, they want to hear more or, above all, to say them.

In the dining room, first of all, we are unconscious of inequalities, for we eat, and eating, like dying, is the common lot. Certainly people in the dining room feel more brotherly and farther away from fighting than anywhere else. What makes Geneva so useful for the peace of the world? Simply the fact that people who

used only to communicate through notes have now advanced to human intercourse and actually talk, walk and eat together.

Table conversation can hardly be anything except good-natured. He is an unnatural, bitter fellow who indulges in backbiting at dinner, a cad who makes personal remarks at the expense of his hosts, a boor who is not mollified into gentleness by the lady next him.

But, within the limits I have just drawn, spontaneity and the right to say anything are the law of the table. Naturalness redeems everything in table conversation. A book may talk like a man, but a man should not talk like a book. Whatever we discuss — and it is difficult to imagine an interesting conversation leaving out literature, politics or morals — we have a right to our full freedom, even to fancifulness. Sallies, humorous descriptions of people's characters, even imitations, in short, all the frolics of wit are lawful. A little teasing is not out of place either, and draws out people much more effectually than admiration.

Several things go directly against table conversation. Music at dinner gives the function something princely, with a dash of Oriental delight, but it kills conversation by its tyrannical charm when it is good, by the irritation it causes when it is poor, by its din when you dine on English boats. Tobacco, the resource of the bored listener, is the enemy of the conversationalist. As for dancing at dinner, it is a pastime for innocent children, perhaps, but it is death to conversation.

All these things go without saying. Other enemies to conversation, less obvious, must be pointed out. A monologue is talk, no doubt, but it is not conversation, even when it is encouraged by common consent and becomes an exciting kind of lecture. When famous soliloquists come to their final reward of chronic dyspepsia people laugh a little cruelly. So, about Sardou, the dramatist, who would demand silence with his left hand while holding his glass to his lips. Caro, the Sorbonne philosopher, was even worse, for the women worshiped him, and the grandsons of the men whom this adoration insulted have not forgotten it.

A story is still remembered of how Renan happened once to make a timid gesture while his dazzling confrère was holding forth. He was instantly frozen by a glance from the hostess. When Caro stopped to drink, the lady, bursting with delight at being able to pitch two such lions against each other, turned with a ravished: "Now, Monsieur Renan."

"Oh!" Renan said, "I wanted

some more potatoes; now they are gone; never mind."

These famous men had something to say; but can you not name dozens of people who have nothing to say but will say that throughout dinner from a sheer physical impulse? They love to talk, they have no idea of conversation, and they are incapable of compunction at the idea of boring a whole tableful of people. I have seen them positively proud of their capacity and bragging of their exploits as of athletic performances. Indeed, that is what they are, but the dining room is not a gym.

Most of us are not inspired by the presence of only one person. We all have had some chance of realizing that dinner conversation can only be something of an adventure if there is a slight element of danger in it, if we hear ourselves talking while everybody else is listening, ready to judge or contradict as well as applaud what we say. But we also know that it is worth while to run the gantlet of mild criticism in this way. If we are sincere and unassuming criticism will be disarmed, and yet we shall feel that we do not speak the same things, or even in the same style, before six or seven people as before only one interlocutor. Inspiration is well known to emanate from the magnetism of groups of people.

The art of listening alone makes possible the art of conversation. Americans, who frequently accuse themselves or accuse one another of being babblers, can listen in a most remarkable manner. Else why should they be the best audience for a lecturer? And why should we see them constantly joining clubs the chief object of which is to provide more after-dinner speeches for them? I doubt if the citizens of any other country enjoy eloquence — that is to say, a good way of expressing oneself — as much as Americans do.

Then why should the art of table conversation be despaired of?

My private opinion is that hostesses are responsible for the state of affairs they now deplore. When, formerly, people gave dinners for the purpose of enjoying their friends' company they seldom invited more than four or six at a time. Then it was almost impossible to escape the combined efforts of the host and hostess to create unity of thought and mood round their table. It was when hostesses, out of sumptuousness or for the sake of convenience, began to invite eighteen or twenty people that table conversation became a mere souvenir of the past.

Fact-Finding—a Revolutionary Science

Excerpts from The World's Work (November, '29)

E. E. Free

As a chemist and physicist Dr. Free has had a wide and varied career from the U. S. Dept. of Agriculture, Carnegie Institute, Massachusetts Institute of Technology, to the editorship of the Scientific American. He is now owner and editor of "The Week's Science" — a highly prized news service. He has written several books.

WHAT chiefly moves our times, I am persuaded, is something deeper and much more revolutionary than the mechanical inventions of this scientific age. It is a change in men's minds, and it has happened largely since this magazine began mirroring the work of the world 30 years ago. It is the invincible persuasion that truth can be discovered only by examining facts.

There seem to have been invented in all the world's history no more than three ways of running a business. One is by rule. Another is by hunches. The third is by facts. The first two, it is obvious, have not become extinct. But if there is any one change which has come characteristically over the face of American business it is decreasing dependence on rule and superstition and the increasing habit of copying the method of scientists; of examining all discoverable facts to make sure that one is as nearly right as possible before one goes ahead.

There is no better sign of this than today's prevalence of business charts. Fun is made sometimes of these pretty pictures for executives — and not altogether without reason, for an office full of charts will no more make a good business man than a gun and bayonet will convert a coward into a soldier. But even scientific methods are not to be judged by their misuses; and that charts and statistics and mathematical formulas are now tolerated at all in business offices, instead of maxims or prayers, is a sign that industrial fact finding and fact facing are coming into their own.

In 1900 the average man who bought real estate near any big city did so by guess or by hunch. He decided that "cities always reverse their growth every generation" or acted on some similarly baseless aphorism. Equally often he asked some local politician or consulted a clairvoyant or took to heart some still wider substitute for thinking, like believing a prospectus. That is why nearly every family whose head had a thousand dollars to spare in 1900 still keeps somewhere the tin box

with the worthless deeds in Deweyhurst or Factorydale.

Contrast this with the modern, fact-finding method as illustrated, for example, by the forecasts of the American Telephone & Telegraph Company. On its staff are some of the ablest mathematicians in the world. Their duty is to decide how many calls or subscribers the telephone company is going to have to care for in a given community five years, ten years, twenty years ahead. Were these forecasts attempted by Caesar's time-honored method of cutting open a goose to inspect the veins on its liver many Americans would go continually without telephones, for it takes time to install the electric pipes and reservoirs and pumping stations to carry and distribute these new floods of speech.

That is why the telephone company has in its central offices in New York City whole floors crammed with charts and statisticians. It is their job to discover all available facts — not fancies — about how each state, city, and city section will grow. These facts are then reduced to forecast charts, precisely as an astronomer plots the course of a comet. So accurate are these forecasts, indeed, that they are guarded more closely than if they were the crown jewels.

Real-estate operators could afford to give fortunes for a sight of these telephone charts. There is, however, no patent on the idea. Any real-estate operator who has energy enough may assemble these same facts for himself and make his own forecasts. A man in any other business may do likewise to foresee the demand for his goods, the probable future prices of raw materials, his future need of capital, or any other matter, present or future, which may affect the proper conduct of his business. It is not guesses that count nor wise saws from the rules of "good business"; it is *what are the facts?*

The telephone industry was a pioneer and is a leader in business forecasting by facts. But — and this is just what constitutes the scientific revolution — virtually every other business is following the lead.

The habit of fact finding instead of guessing has permeated the life-insurance business in hundreds of ways. One result of this better knowledge is the evaporation of many ancient bugaboos. Slightly overweight men and those with abnormal blood pressures are no longer looked at so askance by insurance examiners. Their chances of ripe old age, fact studies have proved, are not so bad after all. On the other hand, there are diseases and disease tendencies, once tolerated as not especially serious, which have disclosed dangerous features which

nothing but scientific fact studies would have uncovered.

Similar studies of industrial insurance have proved that a small proportion of the workmen in a factory usually have nearly all the accidents. Innate carelessness or bad coördination of muscles or some other bodily or mental factor makes these individuals "accident prone." The thing for a factory manager to do is to get rid of these men. They may hurt not only themselves but their fellows. No amount of guessing about the "bad luck" of these unfortunates would have disclosed the truth.

In the factories of the General Electric Company, a young engineer who has turned psychologist, has worked out fact-finding methods of testing a candidate for employment. He discovers by scientific tests the candidate's "aptitudes."

No large business that expects to grow larger or even to keep going considers it safe nowadays to get along without a department of scientific research, sometimes costing millions of dollars a year.

Scientific fact-finding slowly percolates, indeed, even into politics and governmental administration. Each year the Federal government runs more nearly on the ideal system of an advance budget of time, money, and men, based on scientific studies of the facts. The mere fact that there has come into the world such an idea as a budget, whether for a city, a country, a business, a private family, or a schoolboy, proves the ever increasing importance that average people set on knowing the facts.

Indicative of this is an experience of Mr. Travis Hoke and myself with a book, printed a year ago, about the weather. In this were some remarks about the subtle influence of dull or bright days on the average customer's psychology. These suggestions have aroused a significant interest among business men. In 1900 such suggestions would have been dismissed by typical business men as crazy notions of a couple of "fool professors."

The profits of 916 American industrial corporations in the first half of 1929 were 27.4 percent higher, says the National City Bank, than during the same six months of 1928. One reason for this enormously increased earning power, if not its chief reason, is growth of the habit of facing facts; a habit which has germinated in the public mind within the past 30 years. A habitually fact-facing America may go on, it is permissible to hope, to prosperity and accomplishments still beyond those of today. For this scientific revolution is not finished; indeed, it has scarcely more than begun.

Business Men Who Know Women

Condensed from The American Magazine (November, '29)

Sherman Gwinn

WHEN your wife goes into town to buy a new dress and returns home with dress, hat, shoes, stockings, a dozen water tumblers, and a clock, don't blame her!

A gigantic conspiracy has been entered into by business against the American woman! Woman has been trailed, analyzed, and catalogued by the nation's shrewdest merchandisers for the express purpose of making it as difficult as possible for her not to buy. Her habits have been card-indexed, her tastes and whims microscopically studied, and her most casual shopping tours have been made the subject of intricate charts and maps.

The other day, in New York City, Charles C. Nicholls, Jr., told me a great deal about this new profession which uses us, the people who walk the streets, as its raw materials for experiment, and which, it happens, Mr. Nicholls was largely responsible for founding. Since 1914 he has been nationally recognized as an authority on store locations. He has been engaged by great chains all over the country to lease stores for them. All told, Mr. Nicholls has leased or directed the leasing of more than 4500 stores — and the number of these stores that have failed to pay can be counted on the fingers of one hand, which is something of a record!

Today every big store-leasing agent in the country has a system of charting business districts. Mr. Nicholls himself has 423 cities most meticulously charted. He leases stores in distant cities at prodigious rentals simply by consulting his chart book and sending a telegram or two.

Nicholls' charts started a new science, for it was but a step from the study of stores to the study of people who patronize them. Men with tiny mechanical counting instruments were placed on corners at store entrances, at this spot and at that — to count people, to determine what they did, where they went, why they spent.

Nowadays, Mr. Nicholls told me, it is possible for a store location expert to sit in his office in New York and to predict within a few thousand dollars just how much money a new store will make or lose during its first year, though the store is in a distant city the expert has never visited!

More: He can tell you just what percentage of that new store's business will come from women; how many women and how many men will pass its door at any given hour in the day, and how many out of that total will walk in. Yes, and he can tell you what percentage of those who enter will buy and how much the average buyer will spend.

"A store that sells men's goods isn't going to do well if most of the people who pass its doors are women, and vice versa," said Mr. Nicholls. "Too, if the people who pass are not in a buying mood the store won't do well either. For example, the mind of the crowd that is hurrying to catch trains is on the train, not on buying. A few of the men may pause to buy tobacco, a few of the women to buy candy or a magazine, but predominantly the crowd is not in a shopping mood.

"This is also true of the crowd leaving a railroad station. In the morning this is mainly a commuter crowd in a hurry to get to work. It may also contain hundreds of shoppers. But it isn't until these shoppers get a block or two away from the station that they begin to think seriously about buying. The traveling mood, you might call it, must first wear off. Rarely do you find a good shopping district in the vicinity of a railroad station.

"Banks are not an incentive to shopping. People may go into a bank expressly to get money with which to shop but not one woman in fifty will walk directly from a bank into a store next door; forty-nine will pass the store without even seeing it, though in its window is the very article they are seeking.

"Theaters, office buildings, all types of buildings other than stores likewise tend to weaken the shopping mood in their vicinity. If you analyze your city you'll find it divided into districts that reflect moods — the money mood, the industrial mood, the play-goer mood, and others including the shopping mood.

"Each mood is always most intense in the district's center, and that center is a very small area. It is often only a single block in extent and it seldom embraces more than three blocks. There the crowd attains its highest percentage of shoppers, the shopper is most inclined to buy. Within that tiny area you will find the highest land values, the most successful stores, the greatest volume of business.

"Independents sometimes say that they can't afford to pay the high rentals exacted at this central point in a shopping district. The chain stores can't afford *not* to pay them. Hundreds of chain stores would fail if they moved as much as a single block from their present locations.

"There is a woman's side of the street and a man's side. As a rule the woman's side is the side which gets sunshine on winter afternoons. Women like to shop in the afternoon, and December and March are much the busiest shopping months. Therefore, in the North it is the north side of the street which usually is the woman's side; in the South it is the south side. On north-to-south direction streets the west side is invariably preferred by women because it is almost as sunny as the east on winter afternoons and it enjoys shade on summer afternoons when women seek shade.

"Display, coupled with woman's love to shop, is what makes a shopping district. She likes to look in windows and goes where the windows are most numerous. She likes to compare values, styles, qualities.

"Store aisles and counters are so planned that customers are led unconsciously into the way that the merchant wishes them to go. Necessities most commonly bought are the least accessible; luxury goods that shoppers like to buy are the most accessible.

"Women will walk downstairs to save money if the stairway is wide and open, so the basement is made a place for bargains. Men, incidentally, are willing to walk *up*stairs for a bargain, something a woman will rarely do — if she is to go up, an elevator or escalator must be provided, though she will emerge under her own power from the basement.

"In one of our new stores, at the very rear of the room, raised on a platform so that it may be seen from the front door, is a lunch room. Here we plan to serve thousands of women at little or no profit, just to get them into the store.

"There is an old rumor that there is a feud between the Woolworth and Kresge stores, and that whenever one of these companies opens a new store the other usually opens a rival a few doors away. No feud inspires that rivalry but good business tactics. Two stores always draw more shoppers than one. You will find very few chain stores alone in a neighborhood for that reason.

"A lone store in any neighborhood is at a disadvantage. Women become accustomed to making their principal purchases in an established shopping district and patronize the isolated store only in emergency. Furthermore, the isolated store doesn't catch its customers in the shopping mood."

What's Right with America?

Condensed from McCall's Magazine (November, '29)

As Reported by Henry James Forman

WILL DURANT, author of the widely read "The Story of Philosophy," "Mansions of Philosophy" and of a forthcoming "Story of Civilization":

"No one can foretell accurately what kind of culture is likely to evolve in America, but there are signposts. Usually we see a civilization passing through three main stages: There is the pioneering stage of fighting for and settlement of the land; then comes the commercial-industrial stage when woods are cleared, natural resources are tapped, and wealth accumulates; then, last, appears the cultural stage.

"Ancient Greece went through the first two stages in the fighting, heroic Age of Agamemnon, and the financial Age of Solon. Then came the era of temple-building, of great statues, of great drama — the Age of Pericles. The cost of producing great dramas, free to the populace, was borne by rich men — precisely as we now have the Lewisohn concerts in New York, and the medical and educational projects of Rockefeller.

"Which means that we in America are now beginning to pass from the second to the third stage; from the commercial to the cultural. There are many signs visible today that America is culturally hungry.

"I do not decry the rich, because I look upon our rich men, even on those who do not see beyond their own wealth, as a necessary stage or bridge to the next, the cultural stage. John D. Rockefeller, Jr., for instance, has already found that wealth is not enough. His attitude, his life and his benefactions already show that."

WALTER LIPPMANN, editor of the New York "World," author of "A Preface to Morals," "Drift and Mastery" and other books:

"There is no science of history, because history does not really repeat itself. But we can say, I think, that many of the elements which seem to go with great epochs are present in America now. A great surplus of wealth. That means leisure. It also means the power to draw toward ourselves artists, thinkers, inventors, from all parts of the world. An enormous political prestige. A commerce of ideas and goods extending everywhere. A mixture of peoples, which may be corrupt-

ing, but may also be fertilizing. Great self-confidence. Physical courage as yet unimpaired by soft living. A dissolution of the old folkways; and in its train curiosity and hospitality to new ideas. Aren't these the more obvious ingredients of greatness in a civilization?

"We are living in a time when great things are achieved; when new ways of thought and feeling originate. The greatness of America is better appreciated throughout Europe than it is here."

SINCLAIR LEWIS, author of "Main Street" and "Babbitt":

"Growth is the foremost ideal in America. It is still chiefly material, industrial and commercial growth. But eventually it may lead to the ideal of intellectual and spiritual growth.

"I never said that George Babbitt typified the whole country of business men. Likewise, when I wrote *Elmer Gantry*, I meant only that particular individual, Elmer Gantry, not every preacher or clergyman in America. He was one character, not a whole class.

"That is the danger of generalizations. You cannot generalize about America, because you can prove anything about it you want to prove. Pittsburgh, Arizona, the bayous of Louisiana, the prairies, all are vastly differing sections of America.

"Descend in Arizona and you will say America is the most hospitable country in the world. Walk down Bellevue Avenue in Newport, or Park Avenue in New York, and you will tell a very different story. There are many differentiating influences; and climate is one of them. The air of the northern part of our country gives men a febrile energy, frequently futile. It makes us a nervous people. The purpose of writing *Main Street*, of all my books, was to say, 'Go slow.' The hustler is a dull person. He has no time to live.

"In all America there is a very healthy optimism. The depression of the young men in Europe is one of the outstanding facts observable. 'What is the use?' they say. 'By the time we lift ourselves out of this slough of despond, our country will have another war and we shall have to go, be maimed, killed, destroyed.'

"In America, on the other hand, there is a general feeling that we can do the things we haven't yet done. That if we have made mistakes, there is a chance to correct them. This optimism, unfortunately, sometimes expresses itself by bragging. It's like pugnacity. Pugnacity is a form of courage, but a very bad form.

"In Europe, the more intelligent the person the less hope he has of the future. Here in America the young carry a spirit of hope and optimism unknown in Europe."

ROBERT S. LYND who, with Mrs. Lynd, has recently made the most fascinating and graphic survey yet achieved of an American community in "Middletown":

"Middletown endeavors to portray the unease and maladjustment that the rapidity of our recent and present social changes is forcing upon parents, and their children. Yet the picture as a whole is a mistaken one if it does not show both sides.

"For instance, we see Middletown mothers spending far more time upon their children, being more preoccupied with their health and rearing and preventive medicine, than their mothers had been able to do. That, clearly, is one example, and a very important one, of adjustment to modern ideas of living.

"Consider the different eras in which we are often compelled to live in this age of lightning change: The general use of the toothbrush is distinctly a 20th century fact. The religious form to which the users adhere is, say, 400 years old. The hymns are, perhaps, 100 years old. The school curriculum of the children is, shall we say, 25 years old. The pairing of young people in parked automobiles is a recent innovation. So you see, the people involved are living in different eras at one and the same time. Inevitably social problems arise."

So it is that four widely separated writers, thinkers, students, combine with singular unanimity in showing us —

That America is now entering upon a destiny so great as already to arrest the attention of the world.

That the genuine optimism that pervades us is based not alone upon material prosperity; but upon a feeling of movement toward greater things, to a far higher level of culture, spiritual, intellectual, artistic, than any we have yet attained.

That though the transition from the old is often exceedingly difficult, it is being made at an unprecedented rate of speed.

And all this comes not from professional "boosters" of America, but from those who are her severest critics.

¶ An expurgated edition of the Bible has been issued in which the word "harlots" is displaced by "evil companions," and St. John's account of the woman taken in adultery is omitted. Now at last Boston bookstores will be able to sell something else besides greeting cards and mucilage. — ***Outlook and Independent.***

Marriage by Mail

Condensed from The Outlook and Independent (October 2, '29)

Gregory Mason
Writer; explorer; lecturer

IT MAY surprise you to learn that thousands of Americans each year arrange marriages through agencies by mail. It surprised *me* to learn that the percentage of success is greater in these unions than among those preceded by the traditional romantic courtship.

The agencies are well aware that there is a popular prejudice against getting a bride by mail order. Therefore they conduct their business with discreet lack of notoriety. Most of their clients seem to be conservative folk, "the honest, hard-working citizenry which is the backbone of our country." The sincerity of these men and women in looking for the right kind of life partner is unmistakable. Very few of them are triflers and sensation seekers.

How did I make these discoveries? In a well-known sporting magazine I saw the statement that a two-cent stamp would bring me a list of "beautiful, wealthy ladies eager to marry." Hoping to find amusement I sent the stamp. By return mail I received one of the most interesting documents I have ever perused. Its cover was embellished by the portrait of a lady who appeared to be not only very beautiful, but chaste and demure. She was one of the 350 women whose descriptions and pleas for husbands were between the pages of this well-printed catalog.

Surprising, too, were the other photographs. They quite dispelled my cynicism. The ladies were of all ages, from 18 to 78. Most of the young ones looked more accustomed to the tennis racket or the frying pan than the cocktail shaker.

I picked out a dozen of all types and wrote to them, taking care to plant no false expectations! Eight answered. One was just marrying, but replied to my note in accordance with the rule of the agency that each lady must answer every courteous letter with stamped envelope enclosed. One said she had all the correspondence she cared for. Another said my religious qualifications were not adequate (she was an ardent Methodist). The other five expressed a willingness to continue the correspondence but only one of them wrote the sort of flirtatious, come-hither letter which might have been expected. I did not want to get in any deeper, and wrote no second

letter. But I had learned that the business was obviously *bona fide*.

I began to look up other agencies. Only one of them sent a list from which I failed to get genuine response.

Always the procedure is about the same. You send a two-cent stamp for the catalog or list. This brings you glowing literature about the desirability of marrying and a list of descriptions of possible mates, but no names or addresses. These are supplied when you remit the bureau's fee. For men the fee ranges from two to five dollars and for women from one to three. When you get the addresses the rest is in your hands. Nearly all the bureaus call themselves "clubs." You are under no obligation to marry until you actually propose. A small percentage of the members state frankly that they want to "correspond for amusement only." Others say, "write me for amusement and what it may lead to," or "amusement and results." But the great majority are in deep earnest and don't care to waste time on an unattractive matrimonial prospect. Where a mutual interest is aroused, it is usual to exchange photographs after the second or third letter, and if no "results" are reached it is good form to return photographs later.

Generally the women who enroll outnumber the men. This bespeaks a condition in our civilization fraught with pathos for the feminine half. In the world today there are not enough marrying men to go around.

He must be a hardened bachelor who is impervious to the alluring appeals of these catalogs. Think of a lonely rancher in Texas or Nevada reading this:

"Get you a neat, affectionate, true wife, one who will make your home a paradise; a noble woman who will stand by you in trouble, dispel your gloomy moods by her bright smiles and stifle your sighs with warm, loving kisses. We have pretty ladies, ladies with ranches and ladies with city property. Young and handsome widows, alluring Spanish *Senoritas*. We have city Belles and country Maidens and many servant girls who have saved their money and want a home of their own. If you want to marry a woman with money to enable you to start up in business, say so."

Although there is a good deal of frank appeal to the commercial instincts of humankind in the selling literature, my investigation has led me to believe that the matches induced by material advantages alone are very rare. Mrs. Elsa Thorpe, who at Brooklyn, New York, conducts one of the oldest and most successful matrimonial clubs in the country, confirms my opinion. She says:

"Sometimes men join my club

whose chief motive in seeking marriage is to acquire wealth. But they almost never succeed. I discourage this sort of thing, and my lady clients are quick to see through the sort of suitor whose only interest is commercial. Of course, a marriage should be based on common sense, but in my experience nearly every match has an element of romance in it. The sort of people who use a matrimonial bureau are the earnest, careful kind. There is much greater prejudice against divorce among my 3000 members than you would find in a random group taken elsewhere. Some clubs will not accept divorced persons whose former mates are still living." When Mrs. Thorpe's own first husband died, she found another partner through her bureau.

Mrs. Thorpe receives an average of 75 applications a day. "The religious factor is the most important one," she says. "The thing that my clients insist on most is compatibility on the subject of church."

"Not a day goes by," she adds, "but I get letters of thanks from men and women I have happily married, and at Christmas my house looks like an express office, what with all the packages of good things which come in from my grateful clients."

Most of the women, in their applications, express a distaste for "sheiks and parlor lizards," and many of the men vow that "flappers and jazz queens need waste no postage on me." An aversion to extreme blondes and to maids with bobbed hair is also common among men who are earnest in wanting a wife. Also, despite the present vogue of slender feminine figures, the masculine clients of marriage agencies have a distinct preference for girls of a moderate plumpness.

No one of any capacity for sympathy can wade through thousands of these human documents as I have done without being moved by the strain of pathos which pervades them all. It is, "I long for some one I could love as my heart gets awfully lonesome," or "I do not care for riches as I am poor myself. Please let me hear from some one soon as I am very lonely." Such quotations are taken from the catalogs. Naturally the letters one receives when one follows these up are more intimately moving.

The longings of these lonely ones are often awkwardly expressed, their letters are full of literary *gaucheries*. But although I took up matrimonial correspondence as a lark I must confess that in reading the morning mail which swamped me till I withdrew my name from the list I more often found a catch in my throat than a chuckle.

Page Solomon!

Condensed from The Nation's Business (October, '29)

William Hard
One of the ablest Washington political correspondents

I DEARLY love to look on while Chester Gray, high chief legislative representative of the largest of our farm societies, the American Farm Bureau Federation, addresses committees of Congress on the subject of the tariff.

As a looker-on, I note with appreciation that our farmers produce for us today our master lobbyists. Among them the master of masters is Mr. Gray. Talking to a committee, he never loses either his information or his composure. His information is prodigious in scope, miraculous in detail.

He learns that the organized fruit farmers desire a duty on bananas in order to stimulate the domestic consumption of — for instance — apples. Serene, unfluttered, he remarks to the Senate's Finance Committee:

"We have a long list of articles which are called, in our farm circles, substitute products for our home grown American products. Notable among these are bananas. Bananas compete with potatoes, wheat, corn, rice and some vegetables. This is because they are a carbohydrate food, very largely starch. They are not, as is claimed by some, the cheapest food in the world. There are many of our home-grown American products that are much cheaper, per calory value."

Mr. Gray then announces his proposed banana duty. It is 75 cents a bunch. This would work out, Mr. Gray calculates, to approximately one penny per individual banana. It would also work out, the Senators calculate, to the equivalent of approximately 100 percent *ad valorem* wholesale.

A 100 percent duty — even in these days — is a fairly altitudinous duty. Mr. Gray, however, is ready with its justification. He appeals immediately in the name of the sacred word "parity." We all know that farmers must be on a "parity" with manufacturers. Mr. Gray now stretches the concept of "parity" to international affairs. He concludes:

"Our effort is to put the American producer of fruits and vegetables on a parity with the producer of bananas in Central America."

I listened, also, to Mathew Woll, of the American Federation of Labor. Mr. Woll sees American manufacturers estab-

lishing branch plants abroad. He sees them operating those foreign branch plants at low foreign wage costs. He sees them importing goods into the United States at prices which readily undersell the American market and which threaten to deprive American wage earners of certain of their livelihoods. Henry Ford, for example, is now making all his tractors in Ireland and importing them to the United States duty free as agricultural implements. He has many other plants in Europe. He hence wishes to place automobiles also on the free list.

The deduction, as Mr. Woll sees it, is that even now we are seeing a lot of American protectionist manufacturers changing horrifically into free traders.

Mr. Woll, with virtually all of vocal American organized labor behind him, demands a protective system comprehensive and complete. Let the manufacturers and the wage-earners be protected! Let the farmers likewise be protected! He was, for example, quite willing to let the tariff on cream get raised as it has been raised, in this present tariff bill, from 20 cents a gallon to 56.6 cents a gallon, even though the increase would mean an increase in the cost of living for wage-earners.

In return he wished only similar courtesies to the products of wage-earners. In particular, he wished to see good tariff duties laid upon industrial products imported by Americans from their own American-owned plants abroad — such as, for instance, tractors.

It is painful to recite the sort of reciprocity exhibited toward Mr. Woll by Mr. Gray. Mr. Gray's words were these:

"We request that agricultural implements be continued on the free list. They are one of the groups of commodities that we want on the free list. We farmers necessarily must look to buying our supplies as cheaply as possible. If our American capital is going abroad to make agricultural implements the position of those implements on the free list is likely to be of great interest to us."

Thus, then, our farmers should have two nicely interrelated things:

1. Bananas dutiable, in order "to put the American producer of fruits and vegetables on a parity with the producer of bananas in Central America."

2. Tractors free, in order "to give our farmers the benefit of the lack of parity between the wages of the workingmen of the United States and the wages of the workingmen of Ireland."

A hundred such contradictions between the tariff policies of agriculture and the tariff policies of labor could be recounted.

Vaults Versus Safe Crackers

Condensed from Popular Science (November, '29)

Henry Morton Robinson

IN New York a 60-story skyscraper is rising, and at its heart is a mammoth vault, an armored fortress of steel and concrete. Behind the doors of that vault may lie $1,000,000,000. Every human and mechanical device will be employed to guard that treasure. Will it be safe?

I put that question to a distinguished vault engineer, who has built some of the strongest vaults in existence. His answer amazed me.

"Give me a million dollars with which to build a vault," he said, "and there would still be half a dozen men in the world who could open and rob it!"

Nor are these men Houdinis, or Jimmy Valentines who open tumbler locks with sandpapered fingers. They are experts in the use of two of the most terrible safe-breaking weapons known — the "fluxing rod" and the "oxygen lance." Against these latest potential tools of safe breakers, no absolute defense is known. The financial world is waiting to see if any super-criminal will dare to use them. Nothing is "impossible" in the never-ending battle between safe makers and safe breakers.

Only a few people remember Jimmy Hope, but fifty years ago his name struck bank presidents with terror. About 1880 he distinguished himself by boring through the floor of the Ocean National Bank of New York and removing $1,550,000 in gold and bonds from its "burglar-proof" vaults. A few years later, the Manhattan Institute for Savings proudly announced a genuinely burglar-proof vault, whose four-foot wall was studded with cannon balls and whose two-ton door was locked with six enormous bolts sunk deep in the vault's framework. Jimmy Hope and his expert henchmen entered the bank one day, pried open the door with giant wedges, and departed with $2,750,000. The bank was all but ruined.

Then came the invention of the step-door. Its edge, composed of a series of right-angled steps, did not permit the entry of an ordinary wedge for more than half an inch. But flexible wedges in the hands of master cracksmen showed that even these doors were not always burglar-proof. Then doors were made with complicated tongue and groove patterns, rendering entry of a wedge virtually impossible.

But the cracksman had learned a new trick. He forced nitroglycerine into the cracks. The tongues and grooves were an easy prey to the explosive. "When I first saw a safe that had been wrecked with nitroglycerine," one engineer says, "I could not believe that solid metal could be so torn and twisted."

Then science reverted to the cone-shaped "plug" door, machined to fit closer than ever before. The cone shape meant that a charge of explosive would shoot harmlessly out through the crack without twisting the door. But along came the invention of the acetylene torch. Devised to cut away steel girders in buildings demolished by fire, this formidable instrument shears its way through steel like a knife through macaroni. It can pierce a six-inch steel plate in ten minutes. The yeggs fully realized the value of this torch in their trade, and began literally to burn up small country vaults with their new tool.

Today science meets the threat of the "cutter-burner" with composite walls that embody materials resistant to heat, drills, and explosives. Yet even such walls cannot meet the new threat of the "fluxing rod" and the "oxygen lance." The first is simply a stick of soft steel which the expert operator holds against the metal to be burned. Then he applies the oxy-acetylene flame to the tip of the fluxing rod, which oxidizes so rapidly that the temperature can be raised to unbelievable heights.

The "oxygen lance" has been known for some time. It consists of a long, small iron pipe through which oxygen gas is forced. The business end of the pipe is heated red-hot by a cutter-burner. The hot iron ignites in the oxygen stream and flares so fiercely that it will burn its way straight through anything. Blast furnace men use the oxygen lance to cut away "frozen" steel from the tapholes of the furnace.

So expert must be the men behind these instruments that only half a dozen men in the world are capable of breaking into a vault with them. Fortunately these men are not criminals. They are experts whose names are well known. Moreover there are practical objections to the use of such tools illegally. The oxygen pipe is dangerous to use without cumbersome shields. And it generates billows of black smoke when it meets cast iron, leading to probable detection.

Far more likely than an attack on scientifically-designed vaults would be an attempt to break into country strong-boxes. The principal reason why few bank robberies occur today is not so much the strength of vaults as the adequacy of police protection.

Any vault guarded by police alarms is burglar-proof, just as a papier-mâché safe in a fire-proof building is a fire-proof safe. But in such an emergency as a riot, a revolution, a conflagration, or a strike, there is no substitute for a vault physically buttressed by steel and stone.

Consider, for example, the Boston police strike of a few years ago, when a great city was left without police protection. There is no guarantee against a repetition of such an event. Then picture a mob led by a few expert yeggmen, blowing off the doors of vaults and escaping with fabulous sums. It is an unlikely picture; but bank officials must consider such possibilities.

Consequently engineers have been spurred to design super-vaults that will stave off safe breakers, if not indefinitely, at least as long as possible. How successful they have been was demonstrated, in New York not long ago, when wreckers were actually called upon to demolish a newly-built vault because a bank moved. The outer shell of the vault was a four-foot thick wall of concrete for fireproofing and protection against earthquake shock. Then came a six-inch thickness of material especially developed as a protection against the cutter-burner. It consisted of large iron slabs, the outside face tool-proof and its inside filled with a core of magnesium oxide — a material manufactured at Niagara Falls under a fusing temperature of 8000 degrees Fahrenheit, and proof against tremendous heat. Inside this came a seven-inch buttressing wall containing steel H-columns, heavy metallic ribs, crosswise round bars, a filling of rich concrete, and a binding of steel plates half an inch thick bolted to the H-beams. The doors were smooth-faced, conical plug doors impervious to explosive.

A competent wrecking company using the most modern tools found itself all but baffled by this vault. The best progress that the wreckers could make through the walls, even with the advantage of being able to attack them from the inside, was half an inch a day. It took 13 and one-half weeks to demolish the entire vault. Although a safe breaker might have entered it in less time, it is doubtful if he would have cared to tackle the job.

With the design of such formidable vaults the advantage lies temporarily with the protectors of money rather than with the thieves. Still, there is always the threat of some unexpected development in the safe cracker's art, or of some super-criminal with the skill to use the means now known. It is against this possibility that the vault builders are constantly matching their wits in their thrilling war against the unseen.

The Glory Industry

Condensed from Plain Talk (November, '29)

Jonathan Eddy

A NATTILY dressed man entered the office of Mr. Goldsmach, manufacturer of a perfume with a French name in the Hell's Kitchen purlieu of New York. The caller had a message.

"Your employes feel that this 25th anniversary of your connection with the firm would be an appropriate time to show their respect and good wishes. They are inviting you, sir, to be their guest of honor at a banquet in one of the largest hotels. They have asked me to help them out, and I am coming to you just as a matter of form to get your sanction."

Mr. Goldsmach coughed. The idea was absurd. Yet a catch came in his throat as he realized that hundreds of people found something so admirable in his life. Hundreds to gather in his honor. His picture in the papers. His wife, the relatives — they would see at last.

Did Mr. Goldsmach fall for this offering of an hour of glory? Who wouldn't? And did the visitor get his rake-off from the hotel, the waiters' tips, the orchestra, the program printer, the banquet photographer and the bootlegger? Naturally. The only ones unhappy over the affair were a few hundred unsociable individuals who paid five or ten dollars a plate for fear that failure to attend would not be diplomatic for a job-holder.

This type of glory manufacturing provides a livelihood for half a hundred smooth persons operating along Broadway and the Loop. But glory is made to order in a surprising number of walks of life. "You can make a hero out of bloody near anything," says the glory engineer. If this sounds like braggadocio, please consider Balto.

Balto is an Alaskan husky and a very fine dog — so fine that there is a statue of him in Central Park of New York City. Balto led the dog team that mushed through a blizzard to carry diphtheria antitoxin into Nome to combat an epidemic. How many citizens died in the epidemic does not appear in the accounts. Plenty of other blizzards have been mushed through — a musher, caught in a blizzard, doesn't sit down and snooze. He mushes on to shelter. It was the serum that made Balto famous. And how much serum was there? Why, no less than 300,000 units of

the stuff, I found; and Nome is a city of 15,000 inhabitants. How did there happen to be so much serum in Alaska just when it was needed for the glorious dash? The manufacturers could no doubt explain.

But I think only of shaggy Balto plunging onward through the blinding blanket of white, growling to himself, "I have got to save them. My paws ache, my breath comes short, but I must keep these trail dogs in line by courageous example. What if this antitoxin should freeze?"

Well, it *did* freeze; but why bring that up? The story got on the front page.

When America tumbled into the cauldron of war, not everyone was gratified. The glory engineers, then, were called upon not only to endow manslaughter with glory, but even to glorify sugarless coffee and strange brown breads. Mr. George Creel, as Chairman of the Committee on Public Information, was a leader in this work. Later he revealed some of his magic. It included:

Eighteen million copies of 15 pamphlets printed in seven languages.

Fifteen thousand public speakers inspired with glory.

A radio and cable "news" service to Europe, Scandinavia, the Orient, South and Central America.

Mr. Creel "mobilized the advertising forces of the country — press, periodical, car, and outdoor — for a patriotic campaign which gave $30,000,000 worth of free space." Furthermore, his committee "supervised the voluntary censorship of the newspaper and periodical press." He hoped to present his message in "every community in the United States, by written or spoken word or motion picture; until every individual has it seared into his consciousness that this is a war of self defense, and that it has got to be master of every thought and action." That attitude was made glorious to 110,000,000 "thinking" people.

If Mr. Creel stands at the head of war-time glory engineers, Ivy Lee can lay claim to laurels when the world spins sweetly at peace. He is the rose-tinted lens through which the public glimpses the altruistic and benevolent natures of his subsidizers. Among these are such philanthropic societies as the Pennsylvania Railroad, the Standard Oil Companies of New York and New Jersey and the Interborough Rapid Transit Company. The Rockefeller personality was aided considerably by Mr. Lee in its ascent from wholesale pillager to Benefactor to Humanity.

There are glory engineers in the Great American Flying Circus. One of them is T. H. McArdle. Mr. McArdle had been an oil

promoter, with no special experience in the glory industry, but he saw clearly that Lindbergh had overlooked several potential sources of income after his flight, and knew that if he himself had a flight to promote he would arrange things better. What element was lacking in transatlantic flights to lend them their ultimate appeal to the yapping masses? The answer was comically obvious — sex!

Ruth Elder had left her husband — her second husband — and had taken to riding around in airplanes. She wasn't quite good enough in the air to go up alone with a valuable plane, but Mr. McArdle perceived that there was no need of her flying the thing herself. He took on one George Haldeman to do that.

The reporters glanced at the captain and practically forgot him. While he stood aside, Miss Elder posed for photographs, displaying knickered legs and even teeth in a manner to satisfy a tabloid editor. Then she answered questions. Her name was Miss Ruth Elder, she was unmarried, the name of her airplane was *The American Girl* — so it went. There were some whispers that she never intended to fly, that the whole thing was a press-agent stunt for a new movie, but at the actual take-off the newspapers exploded into front page banner heads, and continued for nearly a week to focus the country's attention upon Miss Elder.

One of the first messages received on this side after it was known that the flyers were safe aboard the Dutch freighter was from Miss Elder to Mr. McArdle. It said simply, "You done it." According to the New York *Times* reporter, Mr. McArdle expressed his reaction thus:

"I've promoted projects in Canada and I've promoted oil wells and I have been promoting operations in Florida, and now I've promoted the first girl across the Atlantic. That's what she means when she wires 'You done it.' We're going to keep this thing bottled up till we sell it." Later, vaudeville and motion picture contracts were signed; the story of the flight as signed, if not written, by Miss Elder, was sold; her endorsement was granted to certain products (for a consideration).

Another interesting case: a millionaire pineapple potentate of Hawaii announced a race across the Pacific to glorify the fruit. Ten persons lost their lives. Of the many who have died in attempts to span the Atlantic a number can undoubtedly be accounted to the bright schemes of glory "experts."

Of glory made to order there is no end. Nor will there be so long as we have schemers and newspapers and human nature.

Bogus Checks Increase Alarmingly

Condensed from The Business Week (October 19, '29)

AN ebon gentleman wearing the uniform of a Pullman porter bought a purple sack suit from a Des Moines clothier. The price was $35. The customer fumbled inside his coat and produced a check.

"Da's my pay check," said he. "Jes' cash it and take out fo' de suit."

The merchant looked from the honest black face to the equally frank countenance of the check. The name Pullman Company was printed convincingly at the top. The amount was $95. It was payable to Robert Bartlet.

Fingers again fumbled inside the uniform coat. They emerged with a Pullman badge and an ornate marriage certificate. The merchant accepted the check, and forgot the transaction till he got a concise notice. The Pullman Company repudiated Robert Bartlet and his check. The paper was a fraud.

The clothier learned that he was one victim among many. Gangs using counterfeit Pullman checks and negroes of a guileless expression have secured $170,000.

Such fake checks are counterfeited in modest print shops. An operator known as the "scratcher" forges the name of the paymaster on the proper spot. The "layer down" takes the paper and sells it (for so much per check) to the "passer." It is the last who cashes in with credulous merchants. Pay checks of Bell Telephone companies and many other prominent concerns are counterfeited in this same manner.

Surety companies class check frauds as the fastest growing crime in the country. Losses are estimated at $220,000,000 every year. The increase is about 20 percent annually. Many states are making it harder and harder for the criminal with a gun. Therefore smart crooks are turning to paper frauds.

You may pass 40 bad checks, but as long as you hold down the amount to $10 for each you can only be tried for a misdemeanor. Again, you cannot be extradited from one state to another unless the amount of a single fraudulent check is as much as $100. You may pass 40 bad checks for $90 without that risk.

A popular variation is the counterfeit travelers' check. These imitations are excellently engraved, with imposing serial numbers and signatures, and are cashed after the manner of checks issued by the American Express Company, the American Bankers Association, or Cook's.

If anyone ever presents to you a check of the Canadian Pacific Tourist Association and asks you to cash it, grab the hand that holds it and yell for the police. Half a million dollars has been paid out to such grafters. The Canadian Pacific has no such tourist association. Use the same procedure if you ever encounter the checks of the following: The American Travelers Association; Oriental Tourist Association; United Bankers Association. They all look good and all are frauds.

Filling stations suffer much from these deceptions. A man with a woman and perhaps a child, will drive up and order ten gallons of gas. In payment he countersigns one of his travelers' checks and receives the change. Many good travelers' checks are used in this way; and fake ones often get by just as well.

Business runs on checks. There is so much honest paper that it is easy for impostures to get into the commercial stream. What is more convincing than a certified check? Observe how easy it is for a clever crook to make use of such paper:

A Mr. Morrison opened an account in a Buffalo bank. An accomplice using the name Le Moyne opened accounts in five other banks. To create confidence, good checks were drawn against each account over a period of several weeks. Morrison then issued a certified check to Le Moyne for $2700, almost his entire balance. The check was certified. Five exact copies were faked up — each bearing the forged signature of the issuing bank official. One of these was deposited in each of Le Moyne's five banks. Le Moyne then drew from each bank $2100. He was paid without question since he had deposited certified checks bearing signatures with which the tellers were familiar. Not satisfied with the $10,500 which they got from the five banks, Morrison took Le Moyne into the first bank and identified him so that he could also get money on the original check.

A similar racket was worked on ten institutions. The fake certification stamp and the forged signature were so cleverly executed that no one could determine which was the legitimate check.

To minimize the risk from fraudulent checks observe this rule: Don't cash any check unless you know the holder or unless he is identified by a person you know.

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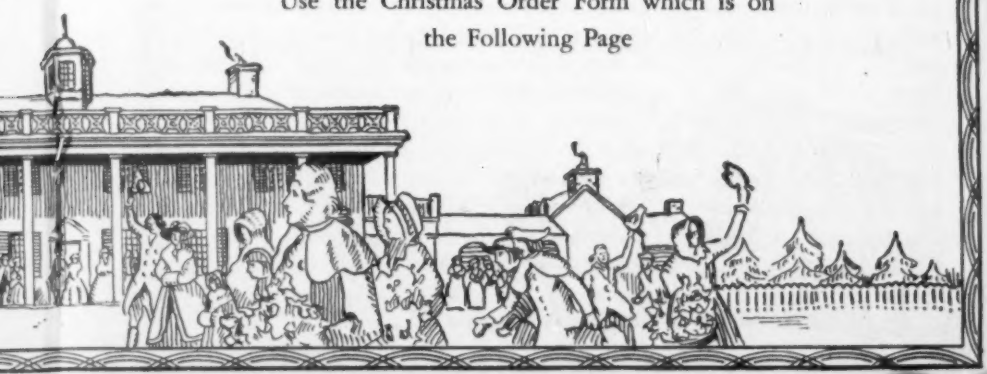

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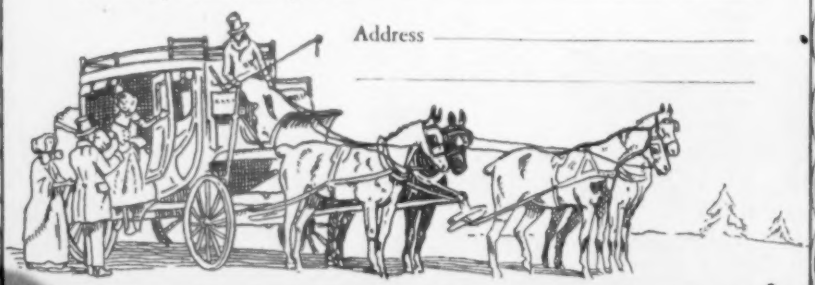

The Talk of the Town

Excerpts from The New Yorker

AVERY, very big executive, so they say, dropped everything at his wife's insistence and spent a month in Europe. When he got to Paris he hired two limousines and an adequate staff of guides and attendants and started out to tour the continent in a big way. A few hours after the party set out, the chief guide ordered the limousine stopped on the top of a hill and said, "From here, m'sieu, one may see the distant spires of Paris." "Never mind the details," said the big executive, "just tell me the names of the countries."

A gentleman returned from abroad says that an American girl studying in Italy went into a moving-picture theater and suddenly realized that she was sitting just behind none other than Il Duce, Mussolini himself. His visit was incognito, and successfully so, for no one recognized him in the half light of the cinema. He was enjoying everything hugely until, in the midst of a newsreel, a portrait of himself in heroic pose was thrown on the screen. The spectators, of course, all arose, cheering wildly, all save Mussolini himself, who sat through the demonstration, fidgeting. His had been, obviously, a rather nice point — whether to stand up and risk being recognized honoring himself, or to remain modestly seated. After the excitement was over an old Italian lady who had the seat next him leaned over and said: "Signor, that's how we all feel, but it's safer to stand up."

Modern chivalry! A crowded Sixth Avenue elevated train was approaching the Thirty-third Street Station when a woman who was standing moved restlessly under the burden of several bundles. A man seated in front of her reached out, tapped her arm, and smiled. "Stay right here, lady," he said, "I get off at Forty-second Street."

Civic pride: A man just back from Chicago says he was being shown around the Art Institute there by a guide who, at the end, proudly pointed out the bronze lions at the entrance of the building. The New York man murmured that they were very nice, but that the Library lions here are also nice. "Yes," said the Chicagoan triumphantly, "but these lions have the longest unsupported bronze tails in the world!"

Specialization. — Roaming interestedly through Harlem, a stroller eavesdropped on this conversation between two colored preachers. "Where you-all a-preaching now, brother?" "Nowhere," was the answer. "A fine preacher like you is, too," said the first. "That's just it," retorted the other. "I'm a preachin' preacher, and what that last congregation wanted was a prayin' preacher, and that ain't in my line. Seems like they's too much specification nowadays."

Miss Beatrice Lillie, the English comedienne, was taken to a high building in Hollywood one evening by a Californian who pointed out to her the features of the city, including the Los Angeles welkin and its stars. "Beautiful," said the actress, "but so artificial. Some night I just know all those stars will come together and spell 'Marion Davies'."

An eminent physician, who once was dean of a medical college, was recently waylaid in his offices by a lady, earnestly asking what to do about her son. The boy, it seemed, had determined to be a doctor and she wanted to know what schools, colleges, universities would be best for the ambitious lad. Touched, the doctor dropped everything to spend half an hour mapping out a thorough course of training. At last, having exhausted his subject, he leaned back in his chair. "How old is your son?" he asked. "Roger is six years old," said the lady sweetly. "He's in 1A."

All sorts of little dramas occur in connection with the transatlantic telephone. One concerned a Swedish gentleman, who came down to the company's offices with just enough money to pay for a three-minute talk with his mother in Sweden, whom he had not seen for twenty-two years. It was her birthday, he explained, and he had been saving for some time to make the call. There was a brief wait and then suddenly his mother's voice was in his ears. "Mother!" he cried, and stopped; he couldn't get out another word, but simply wept wildly for two minutes of his precious three. What happened, when he finally pulled himself together, was that he talked five minutes, at a cost far beyond his savings. What also happened was that the phone company, when it heard his story, did not charge him for the two minutes of crying, and it all came out happily.

Effect of standardization on telegraph operator at Lake Placid with whom a lady filed a message to friends saying she was "having gorgeous time": "Don't you mean 'marvelous,' lady? — that's

what all the others say in theirs."

Many people believe in the future of nakedness. Not without reason, either: wearing no clothes is reasonably healthful and right on the verge of being modish. The only person, though, that we ever heard of who had the complete courage of her convictions is a lady who is the mother of a girl baby. She took the child to be vaccinated last week and when the doctor started to vaccinate the infant on the hip, the mother protested. She said she couldn't conscientiously allow it — it might ruin her daughter's future. "If not on the hip, where then?" the doctor wanted to know. Hurriedly they made a survey of possible locations on the innocent little anatomy that might not be exposed by future dress styles. It resulted in the child's being vaccinated on the sole of her foot — that being the only place that surely might not mar her beauty twenty years from now.

A newly married couple from the city went to spend a week on a Connecticut farm. At the end of the week, the pair returned to town.

"Well, how did it go?" the mother asked her daughter.

"Swell," said the young lady. "I got along all right with everything except the garbage. There was no garbage man, and I didn't know what to do with it."

"Well," said her mother, "what *did* you do with it?"

"Tied it up and brought it back to town," replied the proud child.

For ten years Knute Rockne has been taking husky Notre Dame football teams around the country, like barnstormers. No other team ranges as far and wide as his, and he has done more than any other man, perhaps, to cause the cry of overemphasis-on-football to be raised in the land. His men practice in summer and winter. He himself makes an all-year-round profession of coaching, giving summer courses in that art at Northwestern University for which he uses as textbook a volume he wrote himself.

He likes men to be hard. Every so often he invents a new name for soft-handed males — the latest is "mezzanine-floor hurdlers." The story most frequently told about the Norwegian concerns a player who had cut practice to attend a tea. Rockne held him on the sidelines after that, saying that he was "saving him." During the final game of the season, the youth, still on the bench, asked what he was being saved for. "The Senior Prom," said Rockne. He goes to great lengths to make little parables of the sort as a lesson to his men.

The Light of Edison's Lamp

Condensed from The Survey Graphic (October, '29)

Waldemar Kaempffert
Director of the Rosenwald Industrial Museum of Chicago

FIFTY years ago this month, in what is little more than a barn in Menlo Park, New Jersey, but the finest electrical laboratory of its day, a restless young man with burning eyes stares at a little glass bulb in which a charred thread glows. A veritable frenzy of experimenting has led to this bulb. For days and nights he has not left the laboratory. Food pushed in through windows has been wolfed down. Time and again he has slept on a bench. Eminent scientists have declared that the electric light is an inventor's will-o'-the-wisp. Yet here it is.

"We sat and looked," says Edison, "and the longer the lamp burned the more fascinated we were. We sat without sleep and watched it with growing elation for 40 hours. Still it could not be put on the market. I had spent about $40,000 in bringing the investigation up to that point, and yet in a way this was only the beginning."

Yes, only a beginning. Instead of 40 hours a commercial lamp must have a life of many hundred. The quest for a perfect filament began. That quest cost $100,000, and the 6000 materials gathered included fibers, grasses, threads and hairs from all over the world, including some hairs plucked from the red beard of a certain MacKenzie.

Yet a lamp alone was not enough. What about current supplied in commercial quantities? At that time the most potent source of electrical energy in New York was the Western Union Telegraph Company's battery of 2000 cells. To illuminate a small section of a city with a gigantic battery was technically absurd. The unflagging Edison was constrained to design a generator, a distribution system, junction-boxes, suitable bases into which lamps could be fitted, meters, in a word the whole paraphernalia of the modern central station — something that historians are apt to overlook. We owe to Edison far more than the incandescent lamp, the immensely greater achievement of enslaving electricity in the service of mankind.

The first social effect of the incandescent lamp was a childlike wonder. By the end of 1879 several hundred lamps had been installed to light Edison's laboratory, house, and some of the streets of

Menlo Park. Thousands journeyed to that little village to stare at the lamps, to ask why the filament didn't burn up, and to wonder what would come of it.

No inventor has ever grasped the full social significance of his work. Watt saw in his engine only a new way of draining English mines, and never dreamed of mass production in factories. Bell could not picture the world enmeshed in telephone wires — he thought only of the deaf mutes for whom his experiments were undertaken. Even Edison saw in his lamp only a safer, more convenient light than a gas flame. In reality he made light free, fluid, plastic. After him light became a new social force.

Ever since man appeared on the earth light has been a flame. A torch, a candle, an oil lamp, a gas jet must be isolated because each is a flame-generator which must be kept away from inflammable drapery and wood. Now comes this Edison lamp. Here is not a flame but a glow. The artist sees his chance and wreathes whole buildings in light. Architects spread light over expansive planes, make luminous ceilings, concentrate the glow cunningly for dramatic effect. The stage falls under the new influence and the well-schooled electrician at the switchboard becomes as important a factor in many a play as the actor on the boards.

As light becomes plastic the illuminating engineer appears in factories. For the first time the wear and tear of light on the human eye becomes a matter of economic and social concern. The engineer finds light incorrectly, even dangerously, applied in factories. The tradition of the flame makes it difficult to grasp the new conception of luminous energy which must be controlled as if it were live steam. In the dim days of oil and gas there was little danger of glare, and manufacturers simply let naked bulbs dangle from cords wherever light was needed on a machine. But the contrast between the high concentration of light over a machine and the obscurity a few feet beyond is too much for the human eye. There are accidents as workers stumble from a brilliant circle of light into darkness. Work is spoiled.

The illuminating engineer sets himself to eliminate glare while increasing light. In the Detroit Piston Company illumination is increased from 1.2 candles to 18 per square foot and a 25 percent increase in production results. In the Timken roller-bearing plant the illumination is increased five-fold, and the output increases 12.5 percent. These are typical instances.

It is harder to evaluate the effect of the electric lamp on education. There were night-

schools long before there was incandescent lighting. But what a toll in eyesight the oil-wick and gas-jet must have taken. Surely without Edison's lamp books would have been produced in fewer numbers, and these fewer would be read less by the masses of our people.

In the average home the light used each night is equivalent to 154 candles. The average American laborer works ten minutes a day to pay for this light. Take away a householder's electric lights and he would be compelled to work 24 hours a day to provide tallow candles of equal power, estimating his earning capacity at 70 cents an hour.

Light has even become a therapeutic agent. Lamps so small have been developed for diagnosis that they can be swallowed, or thrust into the nostrils. For the dentist there is the glass rod with a lamp scarcely larger than a rain drop with which the teeth can be explored with a thoroughness undreamed of when the gas flame was in its prime.

Edison himself would be the first to disclaim undue credit for the vast economic and social results that have sprung from his discovery. It was research — organized, industrial research that opened fields of which Edison hardly dreamed. It was research that transformed tungsten from a metal so brittle that it was useless into a thread tougher and stronger than piano wire, although it can be finer than a human hair. The filaments of today are of tungsten. Research has brought the X-ray, the mercury-vapor lamp with its ultra-violet rays, the large-scale distribution of electricity which runs the electrical appliances in our homes. Yet without Edison's discoveries these things would never have come.

Electrically propelled passenger cars now carry 17 times as many people as the steam railways each year. The old steam transportation system is doomed. The 63,000 coal-burning locomotives on our tracks are technical anachronisms, wasteful in manpower, consuming in "stand-by losses" fully one-third of the coal that they burn, and using that coal with such wretched inefficiency that they waste all but 15 percent of the energy in each black lump of it. Only over-capitalization has stood in the way of electrification of our railroads for the last 15 years.

The steam-engine is the symbol of the 19th century; the electric motor is destined to be the symbol of the 20th century. And that, rather than the invention of the electric incandescent lamp, is the most startling outcome of Edison's prolific experimenting.

The Language of the Future

Condensed from The Living Age (September 15, '29)

C. Villalobos Dominguez

Translated from "Nosotros," Buenos Aires Literary Monthly

IT would be foolish to suppose that the babel of languages which now stands in the way of easy communication between the peoples of this tiny world will continue for very many years. More than 3000 languages now exist. But the complicated systems of intercommunication are bringing men all over the world closer together both materially and spiritually. The difference in modes of living and thinking between the inhabitants of different countries is inevitably diminishing.

I do not believe that an artificial language will come to be adopted — the principal thing against it is that absurd sensation felt by anyone who finds himself speaking a "manufactured" language. I believe that a world language will be adopted, not by treaty or agreement, but as a result of natural forces. Some languages are steadily losing ground; others are growing. Sooner or later one of these latter will gain such an advantage over the others that it will monopolize the field.

Already the potentialities of the various languages are clear enough to enable us to name those which are likely to be contenders in the coming struggle. For one thing, all languages foreign to Occidental culture are automatically excluded, no matter how many people may be speaking them today; for Occidental culture is spreading irresistibly even into the Orient, and a civilization of Occidental origin cannot hope to find its expression in an Oriental language.

Turning to those languages which are truly Occidental, I see no reason to expect any expansion of German, French, Italian, Danish, and the other languages which are spoken by relatively few people living in relatively small areas. I therefore arrive at the conclusion (as others have before me) that only English and Spanish have any likelihood of overcoming the others in the struggle. Both English and Spanish have the advantage over all others in that they are spoken over very large and scattered territories which are not only well populated today but give evidence of rapid growth in populations.

Only a blind man could fail to see the great progress that the English language and culture have made in the Americas. The

English race has not only grown strong roots in North and South America, but, as is well known, it has spread over the world into more places than any other and has even rooted itself in places like Australia. And, unlike the abortive shoot which the French language sent out in Canada, English is continuing to spread. Even in a country like Japan it is difficult to find a boy or girl who does not understand at least a little English, and in the larger cities there are more copies of newspapers printed in English than in Japanese.

I do not believe it possible that, in the long run, Spanish can successfully compete against English. If the Spanish people had kept in the vanguard of scientific activity, the Spanish language would today be in a far stronger position. But a language of mysticism, war, and imaginative literature cannot properly fulfill the needs of the present day. When a country does not export the products of scientific, technical, and political research, it cannot export the words with which these things are expressed. A Spanish-speaking person who wishes to investigate any field of knowledge must necessarily turn to a foreign language. Rarely do Spanish terms appear in scientific or technical works.

Everything points to the ultimate predominance of English. The motion picture, for instance, was invented in France; but the Americans have gained a quasi monopoly of this powerful means of diffusing ideas. And now the Americans have invented talking motion pictures, a development of tremendous importance. Sound pictures must be produced in a single language, and this language must be understood by anyone who wishes to enjoy the pictures. These pictures are sent all over the world. It is in the English-language countries that the most elaborate pictures can be made, and it is there that the biggest audiences are found. Necessarily, talking films produced in any other language will be less good. Thus an Argentine, Peruvian, French, German, or Spanish motion-picture fan who wishes to enjoy the best films must learn English.

Can a more powerful weapon for the spread of a language be imagined? And since the various phases of culture are interlinked, the more people there are who know English, the more books and periodicals printed in English will be read, the more opportunity there will be for those who write English, the more advertisements will be written in English, the more products of the English-speaking peoples will be bought — and so on.

American Mercuryana

Excerpts from "Clinical Notes" in The American Mercury

George Jean Nathan

Has been associated, as an editor, with half a dozen magazines, has written for many more, and produced an impressive array of books

WHAT strikes the European as particularly droll about the American is his posture of exclusiveness which takes, among other things, the form and habit of clubs. By way of making himself feel a bit superior to his human surroundings, the American breeds clubs with a minkish fecundity. There are more clubs, for instance, in a town the size of say, Columbus, O., than there are in the whole of France. The club idea in the United States, as hinted, is an outgrowth of the American's desire not for comradeship and association with kindred and congenial souls so much as it is a manifestation of his desire to set himself somewhat snootily apart from his fellow Americans. This impulse is at the bottom not only of the better grade of clubs but is equally perceptible in the motive behind the clubs, societies and orders set up by plumbers, gas-fitters and barbers.

The feeling that he can blackball a fellow democrat and thereafter go home and let the idea of his superiority sink into his wife's consciousness is immensely warming to the American. It makes him feel that he is a somebody and not of the common ruck. The club gives the American a bogus sense of relative aristocracy, and he revels in it.

The increasing affectation of Americans of the upper level of society may be observed in even the most trivial directions. There was a time when they called their house dogs Rover, Bruno, Fido or something of the sort — by plain, simple, orthodox dog names. Today you will have to search assiduously to find one of their pets that isn't named Lord Wimbleton, Matsumai, Lady Hamilton, Victoire the Third, or Duke of Buckingham.

"Life would be endurable," observed Lord Palmerston, "if it were not for its pleasures." The so-called pleasures of life, in the instance of each individual, are largely repetitive; they cuckoo one another more or less precisely from year to year. In his younger years, these pleasures are still fresh and new to a man; they have a kick that is infinitely agreeable; but, as time goes on, they lose their erstwhile appeal

and gradually become transformed into bores.

What are known as pleasures, become, when the civilized man has reached 40 for the most part nuisances. Consider such hypothetical pleasures as dinner parties, banquets, teas, balls, weddings (of other persons), all-night drinking bouts, card games, three-day motor trips, musicales, picnics, and the like. What intelligent man can extract amusement out of such things when he has reached his middle years? The answer is: no such man. But, none the less, such a man's life of necessity often includes the need of participating in one or more of these pseudo-pleasures, and he does so, obediently, politely and despairingly. And each participating makes him more and more miserable. Each invades his cherished privacy, his serious work in the world, his self-esteem. He is compelled to listen to the talk of idiots. He is compelled to kiss brides whom he doesn't want to kiss, to drink more than he wants to drink, to go to places he doesn't want to go, to speak soft nothings to women who he devoutly wishes were in Hell, to eat badly cooked dinners at badly peopled dinner tables, to hold leaky teacups on his lap and ruin his trousers, in short, to do countless things that seemed exceedingly agreeable once upon a time but that long since have become mildly obnoxious. Yet, such is the lamentable ridiculousness of human society, he must nevertheless keep on and on.

Those critics who hold against marriage the circumstance that, under the changes which have come about in modern civilization, it doesn't last, i.e., that the parties to it tire of the relationship and break up, seem to overlook the fact that the same thing happens between men and women where there is no marriage. If the average marriage of sensitive and imaginative persons is a failure because it lasts only five or six years, all that I can say is the average unsanctified love affair of equally sensitive and imaginative persons is a much greater failure, because it usually blows up long before that time.

The Englishman, try as he will, cannot understand or sympathize with the American's immersion of himself in business. The circumstance that the American works at his trade many hours a day more than he himself does, the Briton has trouble in reasoning out. Why the American doesn't play more, as he does, he can't comprehend. The fact, of course, is that the American in general regards business as sport; building up his business and making money are to him

largely what games are to the Englishman. Aside from a relatively few golf players, the American business man in the aggregate has the same kind of fun working himself into riches that the Englishman has working himself into a snappy cricket player.

The observer of the emotional reactions of the American people is brought to the lamentable conclusion that the stimuli which produce those reactions most magnificently show a constantly increasing cheapness and standardization. . . . Consider, for example, the means whereby the American of today is readily brought to an admiration of whichever politician desires his esteem. Privy to the secrets of his emotional gullibility, the politician who wishes to woo his good-will sets about securing it in the following rubber-stamp manner: (1) — by having his photograph taken with his wife; or with his wife and children; or with his old mother; or — and best, if possible — by having his photograph taken with one or both of his grandparents, a view which is invincible in convincing the American that the fellow, no matter whether his grandparents were horse-thieves, comes of solid stock; (2) — by getting his name on the boards of charitable organizations, even though he never once shows up at board meetings; (3) — by patting newsboys genially on the head in public places, thus attesting to his humanness and democratic nature; (4) — by wearing clothes of a not too recent cut, and so indicating that he is one of the plain people; (5) — by pitching his voice an octave lower than is natural, thus giving himself the necessary he-man aspect; (6) — by alluding on every possible occasion to the humbleness of the folk from which he sprang; (7) — by approaching a movie news reel camera in a slightly hesitating and diffident manner, as if he did not deem himself worthy of so great an honor; (8) — by affecting a deep interest in baseball; (9) — by wearing a collar that doesn't fit him and which thus somewhat occultly persuades the American to regard him as a man so busy with important concerns that he has not time for such trivial details; (10) — if the owner of an automobile, to have one of a not too expensive or fashionable make and to be sure that it is no color other than black; (11) — of a college man, by attending more laboring-men's balls and picnics than would otherwise be necessary; and (12) — by denouncing his opponent before election day as being everything from a rat to a skunk, and after election day, by admitting generously that, after all, his opponent is a very fine fellow indeed.

Manchuria the Turbulent

Condensed from The National Geographic Magazine (October, '29)

Frederick Simpich

Author of "The Geography of Our Foreign Trade," "Singapore, the Crossroads of the East," etc. in The National Geographic

IN Manchuria, through turbulent years, three ancient empires have clashed: Russia, China and Japan — the Bear, the Dragon, and the Rising Sun.

In the last three decades, with the coming of Russian-built railways and the immigration of millions of Chinese farmers, Manchuria has jumped ahead by 1000 years, from a region of feudal lords and bandits to a land of huge trade and agriculture, in many aspects strangely like parts of the American West.

So swiftly these changes have come that old and new still clash oddly. Thus, across South Manchuria, you may ride a crack train of American Pullmans, as fast as the Broadway Limited — yet from its observation car you may see peasants pushing wheelbarrows with sails on them, a type of vehicle old in China when Confucius was a baby. Steam shovels are moving mountains; farm tractors scurry across virgin plains, past hamlets where yellow men scratch garden patches with wooden hoes, as in Bible times.

The present era in Manchuria began in 1894, when Japan invaded Manchuria and defeated China in a dispute over Korea. Russia, France, and Germany intervened, however, and induced Japan to give back Korea, lest the peace of the Far East be jeopardized.

On the heels of this action, Russia asked China for the right to build a railway across Manchuria, and China granted the concession. It was agreed, later, that China should govern the railway zone, and that each nation should refrain from propaganda against the other's social and political systems. That clause was at the bottom of the trouble which broke out in June, 1929, when China seized the railway, arrested its Russian personnel, and caused the war clouds to loom over the stage once more. From the building of that railway, the famous Chinese Eastern Railway, dates the rise of modern Manchuria. A spur from this railway was built by the Russians to Dairen, on the Bay of Korea, and is now known as the South Manchuria Railway — the steel paw of the Bear reaching down to an ice-free port. Dairen rose like a magic city, by the imperial command of the Tsar, on an

empty point of rocks. As a youth I saw the amazing spectacle — trainloads of tools, food, tents, materials, brought to build a modern city where there were no people. But today Dairen is the third most important seaport on the China coast! In Manchuria something is always happening!

It happened again in 1904, when Japan fought Russia. Port Arthur, the impregnable, fell. Russia owned defeat, and Japan gained possession of the South Manchuria Railway.

In shape Manchuria is roughly a big triangle. It is perhaps half as big as Mexico, yet its population is already four times as dense. It lies in the same latitude as the land from Cincinnati to Hudson Bay. On the plains its summers may be as hot as those of Kansas; yet winter may see the thermometer 20 to 60 degrees below zero.

In this year of 1929 alone, it is estimated, 2,000,000 Chinese are moving into Manchuria! Carrying babies, pots, pans, and a small bundle of ragged clothes, sometimes chewing grass and even weeds for nourishment, like an army of crawling bugs, these pilgrims swarm out of famine-swept provinces of China. Some go by railway flat cars, others by junk or steamer, from Tientsin or Tsingtao. The fare is only a dollar from Tsingtao to Dairen, yet so many thousands ride that this coolie passenger trade is a bonanza to Japanese steamers. They are packed so tight that there isn't room to lie down on deck. Short as the run is, boats get so filthy that, after the coolies are landed, Japanese workers wear masks and use fire hose and scrapers to clean the ship.

The story of Harbin is the story of what Russia did for the Chinese — opened up a new empire and gave homes to millions. In building the Chinese Eastern, $150,000,000 went from the pockets of Russian peasants into the hands of Chinese coolies. It was this golden flood from the Tsar's money boxes which first moved Manchuria on its almost miraculous path to progress.

Standing on the Sungari river, where the railway from South Manchuria joins the Chinese Eastern, Harbin is the natural center of a vast trade area. This city is a "case" — a social study. With the crash of Imperial Russia, thousands of Russians came east to beg, borrow, or starve in neutral Manchurian towns. Now in Harbin, the yellow man rules over the white; whites work for yellows. This new alignment is strangely significant. The traveler who knows the east is amazed now when white men storm the train at Harbin or Mukden to grab his bags, and he sees white men sweeping the streets or subject to the orders of Chinese policemen.

The South Manchuria Railway is Japan's stake in the country. If you do not understand why she values it so highly, ride through Japan. Forget the curios, temples, and tea houses, the geishas and the frivolous life in the big hotels. Go through the mills or back country, among the peasants in the rice fields. See how dense the population is; see how even the younger children toil for food; and see with what frenzied intensity the island empire becomes industrialized, despite its poverty of raw materials. Then glance at the magnificent South Manchuria Railway, and see how Japan helps feed herself and find raw materials. That line taps a vast, virgin granary of Asia, with immense riches in wood, wool, iron, coal, bean cake and oil, furs, meats, fruits — the things Japan hungers for.

Could the Japanese farmer have competed with the Chinese, whose standards of living are lower, Manchuria might have helped Japan's problem of surplus population. When it became plain, however, that Japanese would not colonize here, the Japanese Government began a program of control through investment. Banks, produce exchanges, industrial enterprises were established. Along their railway zone the Japanese are busy in mines, mills, and factories as directors and technicians. Japan is here controlling the work of millions of Chinese settlers.

That narrow 686-mile strip of Japanese leased right of way contains tourist hotels, model schools, kindergartens, hospitals, laboratories, and farm experimental stations, all set up and operated for the development of Manchuria. Here we find a railway engaged in wide research work at its laboratories. In its experiments with pottery, the wild-silk industry, textiles, oil distillation from shale, firebrick and glass, as well as its development of iron and coal deposits, it has aided tremendously in the growth of local industries.

We perhaps begin to see, now, why cables year in and out carry news of Manchuria. It is the haven for Asia's surplus population. It is the spot where three nations rub elbows: the Bear wants a path to salt water; the Dragon wants a home for surplus farmers; the Rising Sun wants a peaceful Manchuria *in statu quo*. How to find a political *modus vivendi* — that makes history in Manchuria, where something is always happening.

The Dullest Person on Earth

Condensed from Pictorial Review (November, '29)

Gertrude Atherton
Noted Novelist

THE American business man is the dullest creature on earth in social intercourse. He has no time for reading — the pressure is too terrific. No man — or woman — can succeed in the business world without a concentration of all the faculties for something like eight hours a day — perhaps a modest estimate; and that means mental exhaustion until sleep does its work.

Professional men — lawyers, doctors, engineers, etc. — are not quite as hopeless, but even they must specialize so thoroughly that they have few if any lighter interests to make them interesting at a dinner-table. I have met notable exceptions — and even among business men — but any bulk is made up of averages.

I have had a business man go to sleep beside me at a large and imposing dinner when I was doing my duty by my hostess in an effort to entertain him. It was impossible to feel offended; the poor man excited only sympathy.

Social intercourse and the leisure it involves are, or should be, the reward of the day's work. It should be the interlude for intelligent play, a dismissal of all responsibility, and a mental refreshment for the day to come. But the interlude more often than not is a signal for lethargy, with a temporary awakening perhaps after the women have left the table and the men are free to talk business.

Not long ago I sat next, at a luncheon, to one of the greatest financial geniuses of his time. His career had been spectacular and he looked alert and interesting. I made no attempt to talk finance to him, for I know nothing of that subject and inferred that he would be glad to forget his normal preoccupation. But I might as well have addressed myself to his future statue in Golden Gate Park. He was polite and smiled occasionally, but his thoughts were elsewhere — no doubt, on his next big deal. Finally I gave it up, and turned to the politician on my other hand. Politicians can always be relied upon.

But except in Washington, D. C., business men predominate in society, so what is to be done? Persons who can afford it want to give dinners, and even intelligent women want to go to them, for what else breaks the monotony of life? Nevertheless they are beginning to wonder if it is worth

the effort of dressing up and going out. Personally, I have often worked so hard at one of these drab festivities that I have been worn out when I left, and wished I had stayed home with a book.

I should have been quite willing to listen to some man's business adventures, for I am sure they have many, but they appeared to look upon a dinner-party as an occasion for mental rest and gustatory abandon, as well as to regard conversation as a lost art they had no ambition to revive. It is the greater pity because successful business men must have imagination and vision. Otherwise they would be failures and not asked out to dinner.

What is to be done about it? Not about them. They are hopeless. Their minds are overworked. The temporary release from the office means a welcome lethargy, not a desire for change of interest. If they read at all it is a detective story, and their energies are too used up to have anything left for subjects of general interest. As for intellectual ones, were they broached, they would rouse themselves sufficiently to flee in terror.

The time will come when they will be too tired to go out into society at all, or women will refuse to meet them. A business man in the family is affliction enough. Why multiply the boredom?

I see no hope save in inducing the men who follow the arts — writers, musicians, sculptors, architects, painters — and journalists and certain college professors to leaven the lump. But to the man who spends his life in the arena converting a dime into a dollar, all who pursue any of the arts are "effeminate." Business men despise them. Of course this is due to a subtle inferiority complex, but they can not be expected to know that.

In time the husbands might be persuaded to take their dinner in bed (they look even now as if they would be far happier there), and then there might be a lively and interesting dinner downstairs.

American women are restless and aspiring — there are fewer dullards among us than anywhere on earth save in France — and they have a great deal of leisure. They want infinitely more than they get: their minds are starving for something that books alone can not give them. But if men make no demand mentally upon them they see little use in the effort to extend their minds, and are doomed to rot, unless they break loose from the social barriers erected by convention, and make their houses agreeable for men whose interests are as varied as their husbands' are highly specialized.

Creating an Atmosphere

Condensed from the Woman's Home Companion (November, '29)

Annie L. MacLeod

"YOU breathe in oxygen and breathe out carbon dioxide" — that fact we all learned in school. But what a good many of us want to know now is whether we are getting enough oxygen into our tightly built houses, or in crowded auditoriums. And is it true that wood and gas fires use up oxygen dangerously?

In the first place, you would be surprised to know how difficult it is to keep fresh air out of a house. From four to eight cubic feet of air will pass through a square yard of solid sandstone in an hour. In a large room with two double windows (closed) and an outside wall of sandstone, inside which was a layer of brick and another of lath and plaster, the air was found to be completely changed by seeping through the walls every four to five hours on a windless day. In a room with a fireplace the air was changed in one to two hours.

Probably for this reason, even in the worst ventilated auditoriums the oxygen content never varies more than one percent of the normal, which is very small as compared with the change in going from the seaside (where the air contains 21 percent oxygen) to a mountain health resort (where the oxygen content is 17.5 percent or less).

It has been demonstrated repeatedly that a man can get all the oxygen he can use from an atmosphere in which there is too little to support the combustion of a match, so if you can light a match in a room there is plenty of oxygen for breathing. As for the oxygen-consuming power of the gas fire, that is, like the report of Mark Twain's death, greatly exaggerated. The real menace from burning gas in an ill-ventilated room comes from the possibility of accumulating poisonous carbon monoxide.

We can always be sure of enough oxygen, then. But what about the carbon dioxide we breathe out so industriously? An animal cannot live in pure carbon dioxide. The famous Grotto del Cane in Naples owes its fame to the fact that carbon dioxide from the interior of the earth is continually oozing out from the fissures in the floor and, being heavy, collects at the bottom of the cave. A dog entering the cave drops unconscious almost immediately. The upper part of the cave is well ventilated,

however, and human beings whose heads are well above the danger level breathe with perfect comfort.

In pure country air the carbon dioxide amounts to about .03 of the atmosphere. In a shockingly crowded room we may get about 0.5 percent. But even that amount has no noticeable effect on the body mechanism. Submarine crews are supposed to stand 3 percent though this concentration causes rapid breathing and headaches.

It used to be supposed that there was an emanation from the lungs or skin of human beings which produced "crowd poison." This theory was borne out by the unpleasant odor of a crowded room, but an unpleasant odor is not necessarily a poisonous one. The final blow was given to the "crowd poison" theory by Leonard Hill, an English scientist. A group of men were kept in an unventilated room until they showed symptoms of collapse. Another man sitting outside this room breathed the air from inside through a tube so arranged that no "fresh air" could reach him. He remained perfectly comfortable.

And yet bad effects there are in a crowd. What causes them? "Heat and moisture," answers the scientist. With temperature and humidity and air currents properly adjusted, we can cease to worry about the atmosphere we breathe.

The animal body is constantly producing heat. When it gets too hot for the various cells to work efficiently, the skin is flushed: that is, the blood is thrown to the surface where it is cooled by the air. The feeling of discomfort and lassitude which we experience in a hot room is believed to be due in part at least to the withdrawal of blood from the brain to the blood vessels of the skin. At the same time the sweat glands produce moisture which evaporates and so cools the skin. If the air in a room is warm and dry, evaporation takes place quickly, which explains why it is perfectly possible to feel chilly in a much over-heated room. It is rather startling to know that the air in our houses in winter is as dry or drier than that over the Sahara Desert.

When the humidity is increased the rate of evaporation decreases and it will be found necessary to lower the temperature for comfort.

In a crowded room the air is warmed by the body heat of the occupants and is saturated by moisture from their breath. Both these conditions diminish its cooling power and extreme discomfort may result.

In order to determine the relative humidity of the atmosphere in our homes we must have an instrument known as a hygrometer. This is really a pair of thermometers, one of which has its bulb covered with wet cotton.

By means of this instrument the relative humidity of the atmosphere may be known. In general it may be said that the studies of the New York Commission on Ventilation indicate that a temperature of 66–67 degrees F. and about 50 percent relative humidity are the best conditions for schoolroom or office, while a still lower figure is set for any place where physical work is going on.

A factor that we very rarely take into account in considering our heating problems is the difference in conditions at different levels in a room. Hot moist air rises, cool air sinks, consequently our feet are generally kept cold and our heads hot. The body reacts by shutting down the blood supply to the skin in these parts which feel cold and sending it to the head. The mucous membrane of the nose becomes congested and swollen, and the sinuses opening off the nose are partially blocked, so that the head feels stuffy and headache may develop.

Investigation in the English House of Commons showed that the cooling power of the air was 50 percent greater at the feet than at the head level, and there is circumstantial evidence that conditions in Washington may be as bad!

It is extraordinary that with all our high standards of living we have not yet learned to demand a heating system by means of pipes imbedded in the floor, so that our feet may be kept warm and our heads cool instead of the reverse. A room with a floor temperature from 60–65 degrees, with humidity about 50 percent at head level, and windows open a little above the head providing not only outlet for the warm air but the stimulation of occasional variation in the air current, this would be almost ideal and perfectly possible to secure.

Even with our present heating systems much can be done. With a hot-air furnace, the heated air can be passed over a large reservoir of water and so humidified. For steam and hot-water systems there are a number of devices to sit on top or hang at the back of radiators. The effectiveness of such devices depends upon how much water they evaporate. To keep an average house properly humid in winter at least seven gallons of water would have to be evaporated every 24 hours. A well-insulated house with weather-stripped windows retains its water vapor much more easily than a flimsy house.

The first thing for the intelligent public to do, therefore, is to make its windows tight, and then buy a hygrometer and see what they will see. A knowledge of the actual atmosphere in a house is the only basis for improvement.

Religion as Commonsense

Condensed from Forbes Magazine (November 1, '29)

Alfred Wesley Wishart, D.D.
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FOR 40 years I have been preaching the gospel. It has taken just about that long for me to realize how important it is to discard entirely the conventional method of stating the real facts about religion.

Ever since man has been on the earth he has been compelled to make some sort of adjustments to the world outside himself, to nature and to other men. To meet the demands of life he created social organizations, made laws, established customs, fought hostile forces, created ideas of loyalty and patriotism. Moved from within, he began his art career, tried to adorn his person, his cave or hut, to make things beautiful as well as useful. Gradually learning that some ways of life hurt himself and others, he formulated ideas based on his experience into ethical or moral codes and laws. To come to terms with mysterious forces beyond his understanding and to satisfy something within himself, he prayed and offered sacrifices.

Thus in the remote past began what we know today as economics, politics, arts, morality, science and religion.

Every system of religion, with its prayers, sacrifices, rituals, was made by man to meet felt needs. Man has ever been wrestling in one way or another with himself, seeking peace, power, happiness, satisfaction of desire in one form or another. Systems of religion are just as natural and necessary creations of man as bows and arrows, plows, carts, machines, schools, governments, and all the forms of art. They were created by man in response to something within. Men shall not live by bread alone.

Now, are there religious facts or realities which commonsense must accept, which are just as real as economic realities, or political realities, or scientific realities?

In vain do some skeptics in the name of science, of materialism, of mechanism deride these religious or spiritual realities. Commonsense is not satisfied. We know we need not only food, clothes, shelter, health — all bodily needs. We know we need knowledge of raw material, agriculture, business methods, finance — all economic realities. We know we need to understand nature, her resources, her processes, for the practical purposes

of life — all scientific realities. We know we need government, laws, police, courts, and all the other forms of orderly society — all political realities.

But these are not all the realities. What about love, sympathy, friendship, generosity, goodwill, the spirit of service and sacrifice, self-denial, self-control, temperance, humility, patience, moral strength to resist temptation, kindness, justice, hope and faith under stress and storm, courage, confidence, loyalty?

What about the seasons of doubt, fear, discouragement? What about our needs in bereavement, sickness, financial distress? What about our whole spiritual relation to those about us? What about our whole system of values, our sense of things worthwhile and our sense of things not worthwhile?

Are these not facts as real as the stars, rocks, flowers, physical and chemical forces with which science deals? *Is an atom or a sun any more real than a sense of wrong or a craving for peace and power, or grief over death or a feeling of discouragement?*

Commonsense says "Not a bit." Indeed, when we get right down to facts, is not the world within us the most vital, the world closest to us, the world most real?

Hence, the need of something we call religion. And what has it to offer? Are there spiritual facts of which we can be just as sure as any scientist is of scientific facts?

I believe there are. How do facts come to be accepted in the scientific world? When a bacteriologist claims to have discovered a germ and announces it to the scientific world, does that settle it? Do scientists say he is an infallible authority and that we must believe it because he says so? No. Other men discover for themselves what the original discoverer saw. The experience of one man becomes the identical experience of others.

We can test spiritual values and realities for ourselves. Jesus described a way of life. He urged us to trust in the living God, to love our neighbor, to be loyal to a variety of ideals, ethical and spiritual. He demonstrated them in His own life. In Him and in His teaching is set forth an attitude of mind, heart and will toward riches, the poor, the sick, and the sinful. He discussed various kinds of deeds and the motives that actuate us, and pointed out a certain way to live, inspired by the motive of love to God and man.

In all these matters Jesus was dealing with realities that existed before Him and exist today. These things are not true because He said them, but He said them because they are true. In that

sense He was a revealer. He becomes a Saviour when we are actually freed from the evils He described because we actually have His spirit, His love, His power, His attitude toward man and God.

All this is not a matter of believing a creed, or performing a rite, or accepting an historical statement. We are now in the realm of everday life. Love, faith, moral courage, unselfish devotion to humanity's interest, self-control, square and kindly dealing, freedom from the love of gold that shrinks the souls of men — all these are unseen but none the less real things about which we can discover some truth.

Is there any doubt, commonsense asks, that we can know something about the results of good and bad living? Does every man not know for a certainty that some ways of acting and some ways of thinking are very undesirable, destructive and reprehensible? It is not a matter of faith. It is knowledge of reality.

True religious ideals of the sort I describe are not creations of priests or ministers. They constitute a moral order to which we must adjust ourselves if we are to get the highest values of life. Just as a man must obey the laws of health, which he did not originate to be healthy, so he must obey the laws of his spiritual nature if he would get the most out of life.

Any man can test Jesus in this way. He can find out for himself whether there is reality in the ideal Jesus upholds.

This may seem at first a meager sort of religion. But do not be misled by its simplicity of statement. Let any man study the example of Jesus, His motives, His spirit, as well as His conduct. *Let him study Jesus as he studies a business master, or a business system; then let him set out to prove the truth in his own life,* and he will find he has a task that will test his courage and faith and challenge his manhood every step of the way.

Certainty is possible about the really vital elements of true religion. No man achieves a Christian character because he believes a lot of doctrines about the Bible or the church. To possess the mind of Christ is the true goal. To the degree that we have this mind to that degree do we realize in our own experience the value of Jesus and His teaching.

The essentials of the message of Jesus were not matters of speculation or theories of nature. They were matters of daily life. His truth was intended to be lived, and only in our own lives can its value be discovered.

"Sweetness and Light"

Condensed from The Atlantic Monthly (November, '29)

James Truslow Adams

American historian; author of "Founding of New England," and "Revolutionary New England"

SIXTY years ago Matthew Arnold, condemning the "impious uproar" about him, begged for a more normal culture. The tendency of the time, he felt, was to stress unthinking action; therefore he became the prophet of "sweetness and light," intelligence and tolerance, an all-embracing culture as opposed to the narrow doctrine of action.

If Arnold found "impious uproar" in the mid-year of the Victorian reign, what would he find, I wonder, in 1929? Since his time the forces of action have captured the world with appalling completeness.

Perhaps we may consider the five great educative influences for the life of the spirit to be one's daily toil, social intercourse, travel, education, and religion. What of these today?

One's daily toil has always of course had for a main object the earning of a living, but it should have in addition an interest in itself. To find such an interest the worker must feel that he is creating something which he can see grow and develop as a result of his toil. In this respect there was never before, perhaps, a period in which work had less spiritual value for most people than it has today. The worker has been lost in the complicated machinery of production, and in our worship of efficiency the machinery has come to be considered somehow such a desirable good in itself as to warrant any sacrifice in its name.

Social intercourse in the same way has succumbed to the machinery provided for it. Clubs and organizations for bringing people together are legion, but conversation has almost as completely disappeared as has letter writing between friends. We are so busy meeting one another that our minds have almost ceased to meet. Nor is this true only in the hurry of cities. Along innumerable Main Streets, Monday night is for Grange, Tuesday the Red Men, Thursday the Masons, Saturday the Rotary. There is no genuine depth or value to such gatherings—merely a sense of physical proximity to one's kind. For the life of the spirit they are useless.

Travel, again, as its means have become multiplied, has largely ceased to have the educational value it once had. Be-

cause one can make 200 miles a day in a motor, people make it. Because one can cross to Europe and pass through half a dozen countries and back in a month, people do it. Ask any number of people what sort of motor trip they had and they will say, "Fine! We did 180 miles the first day, 200 the second, and so on. No trouble. We were gone only two weeks, and covered nearly 2500 miles!"

A guidebook to London, lying on my desk as I write, tells how one may see the city in one day. When such books can be written seriously, it is evident that the end of travel, the broadening of our minds, the development of our natures, has become lost to sight in the mere machinery of transporting our bodies from one place to another.

Is not the same transfer of interest from the end to the means shown in our educational and religious systems? If one drops in to see a clergyman and inquire about his work, is not one, nine times out of ten, immediately shown over the "plant" — the new parish house, gymnasium, the men's clubroom — or offered statistics? If one goes to a college, one is shown with pride the new "J. Jefferson Jones" dormitory, or the new laboratory or stadium. The body, the "plant," in religion or education is often superb, but one too often looks in vain for the spirit of either Christ or culture.

Arnold would have said — and who can disagree? — that we have lost the power to see life steadily and as a whole. We see only parts, the physical part, the machinery part, and have failed to see the end of these things, the full rounded life of the spirit for the growth of which alone these other things have any value.

Science has not helped us to see life as a whole. Applied science has provided man with an infinity of things of all sorts. These new goods differ in one marked respect from the old range. The old goods, such as enjoying the beauty of nature, reading, expressing one's self in one's work, "making things," playing music, conversing intelligently, looking at pictures or statues, studying, friendship, love, social intercourse, could all be had for little or no money, in civilized communities. The new goods, however, those provided by applied science and business, can only be had in exchange for money.

The consequence is that whoever turns from the old goods to the new at once increases enormously his need for money, and the financial pressure upon the individual becomes so great as in most cases to result in his complete absorption in providing the mere means of living. So far from

increasing leisure for thought and feeling, not only has the time for leisure been greatly decreased, but one's energies have been so exhausted in preparing to live, instead of actually living, that the mind finds relief only in excitable activity.

Our new machinery has increased the whole tempo of life. The spirit, however, cannot be hurried. We may get more quickly to the Grand Central by the subway, but not to Heaven. Quiet and time are essential for the fruits of the spirit.

Arnold prophesied anarchy as the final outcome of a democracy devoted to action rather than thought. Yet I doubt if this is the direction in which we are going to travel. It seems to me that there are signs that the times are changing and that Arnold's doctrine may come into its own. The constant stream of self-criticism that arises from the thinking part of the American people indicates a deep dissatisfaction with life as we now live it. There is a widespread, if vague, feeling that we must have a chance to *be* something rather than eternally to be *doing* something.

The goods offered by the wonders of applied science have been like the glass beads and red cloth offered to savages. We have bestirred ourselves to unwonted exertions in order to get something to trade for them. But we are not savages. We have a long cultural history behind us. We have deep in us desires and cravings that cannot permanently be satisfied with beads and cloth; and there is a limit beyond which we cannot and will not work. If in the future applied science spawns out purchasable goods at a rapidly accelerating rate, we shall, instead of trying to have every new thing that comes along, begin to exercise choice. Once we begin honestly to choose, to decide what we really want, we shall discover that a great many things worth having are those that do not cost anything to speak of — reading, conversation, and other old-fashioned things of the mind. Once the strike is on against working to the limit in order to buy to the limit, we shall begin once more to try to see life steadily and see it whole. With the dawn of that day, the pendulum will begin to swing again toward the doctrine of Arnold.

That doctrine is simply that if democracy is to be saved from anarchy it must be permeated through with "sweetness and light," understood as intelligence and tolerance; that this can be attained only by culture, and not by ceaseless economic activity; and that, eventually, people will not consider that society worth preserving which does not allow them to live normally and fully with all sides of their being.

Tad for Short

Condensed from The Century Magazine (Autumn, '29)

Henry Morton Robinson
Poet; author of "Buck Fever"; frequent contributor to magazines

BENTON HARBOR, 1920. Jack Dempsey is savagely punishing his opponent, Billy Miske, while hundreds of sports writers record the fight. But Thomas Aloysius Dorgan (Tad), the greatest cartoonist that ever sketched a prize-fight, seems strangely quiet. As a powerful blow sends Miske sprawling, Tad clutches at his heart — his "bum ticker" as he sometimes grimly calls it — half rises, and then collapses. He is carried out, revived, and put to bed. And never again did he see a prize-fight!

A wheel-chair, female attendance, and death-behind-the-door — a trio that he feared and hated beyond all describing — became his diet for the last eight years of his life. Yet he kept on turning out his cartoons and columns, adding the names of foreign capitals — Paris, Vienna, Shanghai — to his signature. His admirers fancied him touring the world, but it was all a sardonic hoax. Actually he never left his back porch. Under momentary sentence of death, and in constant pain, he squeezed laughter out of the grimmest material ever handed a comedian to work with.

He knew he was a pitiful failure in the two things he cared about most — boxing and drawing. He might have been one of the world's greatest caricaturists, but he was merely a syndicated cartoonist and "wise-cracker" (the highest-paid in America) hurling misanthropic epithets at his fellow-man. "Bonehead," "nickel-nurser," and "flat-tire" are original tokens of his esteem for humanity. George Bellows once said of Tad: "In catching the complex beauty of prize-fighters in action, T. A. Dorgan is without a rival." A strange gamut, this Dorgan psyche. And a wretchedly unhappy one.

As a boy it was Tad's ambition to be a scientific boxer like Jim Corbett. So he rigged up a punching-bag, and took his part in the fistic brawls that were an important part of a young man's education in the San Francisco of 1885. When he wasn't battling, he was drawing ring battles, with plenty of red crayon to indicate the "claret."

Suddenly a terrible accident marred this too-blissful existence. He was investigating a

windlass with nine-year-old curiosity when his hand got caught in a moving cable — and when he emerged from the ether, he faced the competitive struggle of life with only the thumb and first knuckle of his drawing hand left.

But this cruel physical injury was as nothing compared with the consequent psychic handicap. Actually, Tad's deformity was scarcely noticeable, but it powerfully affected his whole psychic life. It put him on the defensive, made him bitter, caustic, domineering. He became an aggressive wit, always anticipating a thrust by attacking first. Tad was rarely defeated in repartee; but if he was, he promptly snatched the button off the foil of good-humor and thrust his weapon into his rival's vital parts. It is significant that someone is always getting hurt in Tad's cartoons.

His father wanted him to be a bookkeeper, but Tad hated ledgers and routine. He found a berth as an office-boy in the art department of the San Francisco *Bulletin*, where his humble task was lettering and shading regular artist's work. Once in a while he'd sneak in a picture of his own, which was so much better than his superior's that jealousy was born and Tad lost his job. But he came around to work the day after he was discharged, and the next day after, too; for a year he received not a cent of pay, but took on any crumb of an assignment that came his way. In his idle hours he drew cartoons of local events and personalities which were so skillful that at last his boss had to let them be published. In 1897 he was hired as the regular *Bulletin* artist and boxing editor.

His pictures began to achieve national prominence, and in 1903 William Randolph Hearst, recognizing the power of a stinging political cartoon, brought him to New York. Hearst had his eye on the mayoralty, and the ensuing contest was made one of the most exciting in the history of the office largely because of Tad's powerful cartoons attacking Tammany. When the ballots were counted, Tammany had a bare margin of 3000 votes — the smallest plurality in the history of New York elections.

After this election Tad went back to his first love — sport cartoons. He never wearied of drawing the perfect physique of prize fighters. It is said that he could reproduce from memory any important blow or series of blows in the major fights of Sullivan, Fitzsimmons, Corbett, Jeffries and Jack Johnson.

It was his affectation to despise what he considered affectation of any kind, especially if it veered toward elegance. He hated what he called "two-dollar words" and

"high-hat" manners. Unreasoning prejudices against certain brands of cigarettes would lead him to insult any one he saw smoking them; these prejudices extended to motor-cars of certain makes, many types of hats, and so on. When Gene Tunney lectured on Shakespeare at Yale, Tad was disgusted. "No matter how thin Tunney cuts it," he remarked, "it will still be boloney."

Many of Tad's admirers have wondered how he kept in touch with the sporting world and drew pictures eight years after he was confined to the house. Tad had two Chinese boys whom he and Mrs. Dorgan adopted years before. Tad trained one of these boys — "Duck," he called him — to go out in the highways and byways of sportdom and gather material. So "Duck" went everywhere, acting as eyes and ears for Tad. He would come back from a fight and reënact the battle blow by blow. One of the most thrilling things I have ever listened to was "Duck's" description of the Dempsey-Firpo fight. His careful analysis enabled Tad to make a superbly realistic drawing of an event he had never seen.

Tad's "Judge Rummy" comic-strip ran for 20 years as one of the national preferred comics. He created "Judge Rummy" and his crony "Silk Hat Harry" while the notorious Thaw trial was in progress, and parodied the incidents so closely that he narrowly escaped prosecution on libel charges. The characters were drawn to resemble dogs, but no one could miss the human implications. His graphic satires, his "Indoor Sports" furnished an acid commentary on our national life.

It has been reported that Dorgan remained cheerful to the end, and most of our newspaper accounts have revamped the old "laugh, clown, laugh" formula for his passing. That is sheer romance. During the last eight years of his life he was always in pain; he felt that life held nothing more, and perhaps he was afraid to die. How could he have been cheerful? In a restless fury he sat at his radio, twirling the dial in and out of a dozen stations in the same minute. It required all the tact and resource of a devoted wife to bring him out of his desperate moods; toward the end her bravest efforts were unsuccessful, and nothing could appease him but work. He plunged into his daily stint with feverish gratitude, for here at least he was the master and critic of life. For months before the end he was on the flat of his back, yet he kept at his drawing-board, turning out his daily cartoons and manufacturing new slang. He died, May 2, 1929, with his pencil in his hand, his work two weeks ahead of publication schedule.

Bernard Shaw's Undying Youth

Condensed from Physical Culture (November, '29)

Judge Henry Neil
An Intimate Friend of Bernard Shaw

MR. GEORGE BERNARD SHAW, who is perhaps the most spectacular figure in the world of modern letters, looks as if he took a bath every hour of the day. His movements bespeak energy. His body and brain are matched to a remarkable degree in a rapier-like keenness. He is a live wire, a human dynamo. When I was at his country home, he showed me how he keeps fit by getting up early in the morning and vigorously attacking the domestic woodpile, and by striding over the countryside with the strength and swiftness of a 20-year-old athlete. He is also fond of cycling and knows more than a little about boxing. When obliged to live in his London apartment, he takes a vigorous daily swim at the Athletic Club.

This fondness for exercise, coupled with the fact that, ever since he was a boy, Shaw has eaten a diet composed almost entirely of fruits and vegetables, explains why he, now 73 years of age, still has what Arthur Brisbane describes as "the clearest brain of any person now living," and a physique that can hold its own with that of such a noted athlete as Gene Tunney.

These two men have recently been staying in adjoining apartments at the Hotel Nettuno on the island of Brioni, in the Adriatic Sea. Every day their schedule was the same. In the morning a cold shower was followed by a long distance swim. When they had covered several miles of water the friends would lie on the surface of the sea and bask in the genial warmth of the sun. After the swim the former world's heavyweight champion and the world's wittiest playwright would take a long walk, the white-bearded Irishman and the broad-shouldered young American keeping perfect step together.

When Shaw was a very young man his father said to him, "My son, I'm afraid I'm a failure. Take me as your guide. Whatever I've done, don't do."

This set the struggling writer thinking. He noticed the things his father did, that he ate indiscriminately, and large quantities of meat, that he smoked all day and drank alcohol and that he took no form of exercise.

"Come to analyze it," said Shaw to himself, "most men have the same habits as my

father and most men are failures. A complete change of habits might produce success. Anyway, it's worth trying."

So, from that day, Shaw ate no meat and not only did he eschew alcohol but he also gave up tea and coffee. He did not smoke. He took all the exercise he could manage. He found this régime suited him. His body gained perfect health and his brain became clearer and more brilliant every day. An active young man over six feet tall naturally gets hungry, so Shaw ate his fill of vegetables, fruits, nuts, coarse breads, and drank milk, and on this diet he has become the world's most brilliant satirist.

Shaw never discusses food or food fads with his guests nor does he try to force his food habits on his friends. The meals served at his country home or his apartment in London are just the same as the meals served in any other English home. He sits at the head of his table and carves the mutton or the chicken.

Shaw has, of recent years, become an ardent sun worshipper. He spends most of the winter months on the French Riviera or in Italy, where he devotes much time to sun-bathing. In the garden of his country home he has had a revolving hut erected which he can adjust so as to obtain the maximum of sunshine at all hours of the day.

He told me that doctors cannot cure diseases, they can only help intelligent people to prevent getting diseased. The people who live rightly and eat correctly do not become diseased, he said, and he himself is the finest example of right living and correct eating.

He has been described as having the wit of Oscar Wilde, the ferocity of Swift and the satire of Voltaire. He candidly admits that he considers his brain is unique but he does not pose as a genius who has had these remarkable qualities bestowed upon him at birth by a fairy god-mother. On the contrary, he ascribes his success to the same kind of training that won for his friend Gene Tunney the heavyweight championship of the world. Shaw said that when he was a boy he certainly had no "brilliancy," "wit," or "genius," and that any person who chose to go through the mill as he had, and would devote his heart and soul to developing his brain by the same drudgery, for 30 years, could achieve as much or more than he, Shaw, had achieved.

Shaw has always been a fighter. The results of his hard training will be remembered when those of other pugilists are buried in oblivion.

Making Citizens in the Near East

Condensed from The Review of Reviews (November, '29)

Barclay Acheson

FOURTEEN years ago the American people undertook to make good some of the damage that war had wrought in the Near East. That task, for which the Near East Relief was created, proved to be a double one. The first was the feeding, clothing and hospitalization of adult refugees. Next came the problem of training 132,000 homeless children left destitute in an alien land.

These children were assembled in hastily constructed shacks, abandoned palaces — anything that was available. Out of these heterogeneous shelters grew orphanages, hospitals, clinics, schools. Gradually order came within these places, and with it health, and cleanliness. Books and teachers arrived from America, and schooling began. Then Near East Relief faced a new problem. It could teach 132,000 children the three R's. But could it teach them how to earn a living when, at the age of 16, in sturdy new frocks and suits, with a change of underwear under their arms, they marched out of the orphanages to face the world?

The Near Eastern countries were in desperate circumstances, economically, after the War. Many industries had been obliterated. Tens of thousands of adults were out of work. Try to imagine Greece, with a normal population of 5,000,000 suddenly swamped by a wave of 1,000,000 refugees — much as if 25,000,000 immigrants suddenly poured into the United States, with this difference: that Greece has nothing like our natural resources. In some countries the currency was worthless. There were times when the only negotiable currency of a country was a Near East Relief draft.

The Americans in charge next made a careful study of labor requirements so as to train the children for non-competitive positions. These were frequently obtainable because of the introduction of modern machinery, or the awakening of new social needs. A great social renaissance was inaugurated in the Near East. Persons trained in practical farming, or as rural teachers, village nurses, automobile and tractor mechanics, or electricians found employment where common laborers could not.

The orphanage graduates were welcomed even in overcrowded

rural communities, because they knew how to make two blades of grass grow where only one had grown before. In the past five years there has been an increasing endeavor to serve the communities through the children placed in them. This has been done through the medium of demonstration farms and extension farm training, traveling health wagons and clinics carrying a message of improved hygiene, and welfare centers designed to promote a better-homes movement. In the orphanage trade schools the children have been prepared to go out as leaders in these various progressive movements.

Governments have approved heartily of these activities — agricultural, medical, and social welfare — and have requested their continuation with government coöperation. This will be the future task. The newly formed Conservation Committee is now at work rooting the children into the social structure of the countries in which they live.

In addition to the job of administering relief and caring for and training children, this American organization has built up a great fabric of international good-will which has impressed both individuals and governments throughout the Levant.

A New York paper recently said, "Nothing accomplished since the War; nothing in which so many Americans as individuals have participated, better illustrates that spirit of true philanthropy and business efficiency of which this country in time of emergency is ready to give proof."

The devastation which swept the Near East rendered millions of people destitute. The records of the Near East show that it alone saved the lives of a million and a half of these people; that it clothed at one time practically a whole nation in Armenia; that 132,552 children were sheltered in institutions and an incalculable number served in other ways.

In short, to look back over the last 14 years is to realize that this organization has had the privilege of expressing simple friendship on an international scale. As a result, a tradition of good-will and understanding has been established that will endure.

England Looks toward America

Condensed from The Yale Review (Autumn, '29)

S. K. Ratcliffe

English Journalist, former American Representative of "The Manchester Guardian"

IN trying to form an estimate of popular feeling toward America in England, we must take account, to begin with, of three public matters so powerful that they dominate the scene. They are: the colossal development of American industrial and financial power; the question of naval limitation; and the war debts.

Upon the first, I need only say that since the prosperity of the United States provides a most impressive demonstration that America's great day is upon us, the misgiving of England, which has held that leading place in the world for so long, is very easy to understand. Upon the second, I may point out that the American people have overwhelmingly demonstrated, by their agitation against recent navy bills, that they are hostile to the policy of building a great navy in a time of profound peace and security. But it is equally impossible to doubt that the governing opinion of the United States is firmly set against the continuance of British supremacy upon the seas. Parity, then, may be attained only by America's building up or by Britain's giving up. It is one or the other. Therefore within the next few months a basis must be found for "a downright major cut in armaments" or the day will be lost. Happily both President Hoover and Premier MacDonald seem to be fully conscious of the gravity of the situation.

The question of the war debts is, for the mass of the people on both sides, fundamental, and the most distressing thing about it is that there is virtually no common ground to be discovered at present. The American people believe that these debts should be treated as debts, to be repaid. They are right. The British people hold that in practice it is impossible to keep the question of the debts separate from the question of reparations. They also are right. There are, I believe, two central facts that should be made clear to the multitude on both sides of the Atlantic. The British people should be helped to understand that there is no war debt being paid by themselves to the United States. For several years past the amounts received in London from outside on the debts and reparations accounts have been balanced by the actual payment to America: and as a consequence, the

cancellation of the debts would not make any material difference to the burden of taxation in Britain. The American people, for their part, should realize that there are, strictly speaking, no inter-allied debts. There is, and can be, one debtor alone — Germany. There is, and can be, only one creditor — the United States. I am not making this result a matter of international criticism. On the contrary, I hold that it is a far less desolating result than would have been the economic servitude of the German people to the victorious European powers, for it is certain that the American people will not enslave the German people. I am saying merely that the actuality is something very different from the popular conception of reparations and debts.

Let us consider, now, certain factors in our problem of Anglo-American relationships that are hardly at all connected with war and treaties and debt-settlement policies.

A London weekly paper, circulating mainly among the class which we English in our snobbish fashion call the "lower-middles" (clerks, primary school teachers, salesmen, and so on), recently held an essay competition on America and Americans. In reading these papers I was struck by the fact that the majority of the writers seemed to take for granted that a certain unfriendliness toward America was normal among the British people. I could not help noticing the persistence of outworn prejudices and the tendency to accept the established types of the stage and the comic press. Americans were said to be crude, loud, bragging, and offensively patriotic; while contemporary America was identified with jazz and speed, the grossness and silliness of the movies, gangs and gunmen, and the spreading over the world of a mechanical standardized civilization. Most important of all, there was not in that whole batch one paper expressing admiration or approval of America — and I fear that those papers were not unrepresentative of a large portion of the British public. Most of the writers seemed to be groping after something in the situation that undoubtedly creates for the generality of British people a very great puzzle, a contradiction that baffles and, at times, infuriates them. What is that puzzle?

The American of the present day lives and moves in the consciousness of belonging to a marvelous land, and for my part I cannot see how he could do otherwise. The United States is an astounding country. But the American is often convinced that his civilization is superior to every other. You may say that

there is nothing distinctive in this, since we all hold views of the same nature about our own countries. The Englishman is so certain of his country being the finest and his race the highest that he does not often take the trouble to mention so obvious a fact. But there is, nevertheless, something nationally peculiar in the common American consciousness of superiority. It is proclaimed with solemnity on all occasions. American politicians and business men feel they must announce it. The churches ring with it. A reference to it is likely to occur in any eloquent prayer.

The European naturally contrasts this greatest of national claims with the picture of the public and common life of the United States as it is presented to the less fortunate people of the Old World. What is that picture, and by what means does it come to us?

It comes mainly through three channels: American novels and plays; the casual and fragmentary news of the daily newspapers; and the constant and universal medium of the moving-picture screen.

The increase in the number of American books published in England has, during the last ten years, been enormous. At libraries the demand for American novels and short stories is insatiable. But here is a most significant fact: English readers have come to believe that fiction reflecting the finer aspects of American life has almost ceased. The almost universal assumption is that the living fiction of America belongs to the literature of revolt, of defiance and despair. Sinclair Lewis has established a wonderful renown, and Upton Sinclair and Theodore Dreiser are read in England as annalists of social reality. And it would be impossible to estimate, or even to guess at, the effect made upon public opinion in England by the number of cheap and cynical novels depicting the behavior of America's flaming youth.

Americans complain about the meager news of their country in the English press, of its odd selection and contemptible quality. As a journalist I agree with them; and as a regular visitor to the United States I contrast these absurd fragments with the remarkably full, graphic and usually well-informed London dispatches to be found in the leading American newspapers. America is interested in English news. England does not seem to be interested in news of America unless it is sensational or comic. That is the fact: we on our side get news of violent crime, of hold-ups, of bootleg wars, of the disgusting doings of the vicious wealthy, of lynchings, Hollywood,

and the antics of ex-Mayor Bill Thompson or Mrs. Aimee Semple McPherson.

So much for the newspapers. But think of American civilization as it is portrayed on the screen, not in uncertain driblets but in a continued and overwhelming spate! It is surely appalling to reflect that literally nothing in the world today is so universally familiar to the vast multitude of our fellow creatures as the picture made of America by a small crowd in Hollywood. There it is: the crude imbecilities of Wild West drama; the rawness of industrial production and business adventure, of cocktail parties, night clubs, the duel of sex, and the degradation of marriage; of bootleggers and hijackers, the high-powered car in robbery, revenge, double-crossings, and juvenile debauchery — mean and abominable people incessantly doing mean and abominable or farcical things, with a lawless and lunatic waste of money, and against a background of luxury and indulgence such as the peoples of the Old World have known about from this American revelation alone.

No one can estimate the social effect of American films on the people of Europe. This self-chosen means of self-portrayal is to the outside world a comment of unlimited irony upon the claim that America stands for the highest level so far attained in individual satisfaction, social morality, and public welfare. I submit that we have here an urgent problem of international relations that should be a challenge to the best elements in the English-speaking world.

Before the Great War England, I believe, was more friendly toward America than America was toward England. Matters are different today. Anti-British feeling in America seems on the decline even while anti-American feeling in England is increasing. Notwithstanding this fact, there is an overwhelming determination among the British people to lay firmly the basis of a structure of enduring peace. The emergent Britain of our second Labor government, presided over by Ramsay MacDonald — who, whatever else he may be, is a fine internationalist and an immovable friend of America — is in a degree beyond all comparison with the Britain of the past a country with which America can make friends upon the most honorable and mutually satisfying terms.

How to Be Happy Though Famous

Condensed from Liberty (November 9, '29)

Mary Pickford and Douglas Fairbanks
Famous Motion-picture Stars

WE, like all other mortals, are busily engaged in the quest of happiness.

The reader will please not infer that we take ourselves to be authorities on the subject of success and happiness. It is our belief that no one upon whom fortune has heaped a full measure of success has really the slightest idea of how it all happened. We would be great hypocrites if we did not acknowledge that luck has played a leading part in our lives. So, let us set down our little homily thus: "Be as lucky as possible and nothing can prevent your ultimate success."

If there is one thing that exceeds the futility of telling people how to be successful, it is telling them how to be happy. The very term "pursuit of happiness" is misleading, for it implies that, like some kind of game, it should be chased to its lair. Whereas everyone knows from common experience that the harder you go after it, the less chance you have of finding it.

To us, happiness is the direct result of learning to be contented with conditions that cannot be remedied, and discontented with conditions that can be improved — and then striving to improve them. This almost exhausts our total stock of wisdom on the subject.

We invited a newspaper writer to our home in Beverly Hills for the week-end. Although he politely did his best to conceal it, it did not take a mind reader to detect that he had come to study us so that he could pass on to others the secret of our supposed success. He left us, we fear, baffled and disappointed.

For what did we do that evening? Before dinner we stood out on the lawn and watched the yellow full moon with binoculars, and observed that the top was dented by a huge crater. Going indoors, we sat before a log fire while George Ade and Charles Chaplin, who were among our guests, engaged in a spirited contest to see who could remember and sing the oldest songs. At dinner, we fear, the conversation did not soar to any great heights. We talked of the usual things: the future of California and the motion-picture business, our next productions, and so on.

After dinner, someone made the assertion that no one in the company could walk naturally

through the dining room, without exhibiting a particle of self-consciousness, precisely as if no one were watching him. This led to other similar diversions. They were not very intellectual, no doubt, but they caused endless merriment. Then we walked outdoors again, planned a picnic breakfast on a mountain top at sunrise, and went to bed before 11. Our newspaper friend was unquestionably disappointed at such a commonplace evening.

The most unhappy people we have met are those who are constantly seeking new and more extraordinary ways of gratification, who feverishly follow every new cue to pleasure, and careen madly after happiness. The pleasure-seeker is nearly always a discontented person, finally deserted even by the illusion of happiness, and the man who makes a business of pleasure is the last person to find it.

But this philosophy is not very original either. Disguise it as we may, it is only another plea for simplicity, a brief for the simple, ordinary, and unfashionable pleasures — a suggestion that the feverish rush after enjoyment is carrying us way past our goal into a land of satiety and boredom.

This experiment we would recommend because we have found it successful: that those whose lives are crowded with amusements look over their list of social engagements for the week and ruthlessly cancel three-fourths of them. We think they would be surprised to find with what a quickened sense of enjoyment they would greet the ones that remained and with what a feeling of relief they would welcome a few evenings in which they could do exactly as they liked.

When once the adjustment is made — and that is always difficult — one is sure to find that, for no other reason than force of habit or some social coercion more fancied than real, he has been doing things that not only did not add one jot to his general happiness, but actually bored and depressed him.

It has been our experience that one can come closer to a full enjoyment of life by this process of simplification and elimination than by adding and multiplying one's forms of amusement. There are a lot of non-essentials masquerading as pleasures that one can dismiss without the slightest sense of loss. It sounds paradoxical, but it is really a fact that one of the best ways of adding to our happiness is by decreasing the number of our pleasures. The needs of life, the requirements for happiness, are so few and simple that they are within the reach of everyone.

Good digestion, which means good health, plenty of fresh air

and exercise, occupation with some worthy purpose, even if one does not get very far with it, and the zest of life and peace of mind that go with these things — this, so far as we know, boxes the whole compass of human enjoyment.

Take away one item, and you may chase happiness to the ends of the earth and not find it. Add to them *ad lib.* — set the cumbersome machinery of pleasure running at full speed, introduce every new device for enjoyment that man can invent — and you will have added nothing important.

Such a philosophy runs against the restless current of the times. Yet we know that it suits us. We discovered long ago that what we liked best were simple things, freedom from social compunction, the right to live without dictation. And here at home, resting quietly after a day's work, seeing people we want to see, affecting nothing we do not feel, refusing to do things because someone else finds them amusing, looking forward to the future with enthusiasm — this is the best way we know of being happy.

Being ordinary is, under the conditions of modern life, something of an art. One of the commonest illusions is that in order to make an impression on other people we must assume qualities we do not possess, adopt airs that sit but poorly upon us, and in general try to sustain the fiction that we are more gifted, important, and splendid than we really are. The temptation is particularly great for a person in the public eye.

The motion-picture star is in constant danger of believing what his press agent writes about him and trying to behave so as to uphold the illusion. The best corrective is a sense of humor. When someone tells us that we attract larger crowds, when we appear in public, than the President, we reflect that a white elephant walking down Main Street would draw a larger crowd than any one of us.

The strain of acting up to people's expectations has grown too great. We have fallen back on the simple expedient of being ourselves and reserving our acting for the screen. Incidentally, cultivating a taste for simple things has been a great benefit to us in our work in that we find it easier to speak the common human language of hope, love, fear and the other elemental emotions.

And we are inclined to believe that nothing great of any kind can be achieved with a feeling of superiority to what one is doing or for the people for whom it is done — that nothing notable has ever been written, composed, chiseled, or acted with the tongue in the cheek or with a sneer.

Wall Street and the Research Laboratory

Condensed from the Scientific American (November, '29)

Raymond Francis Yates

Editor of technical journals; specialist on stock-market operation; author of "How to Lose Your Money in Wall Street" and many other books

THE modern investor, if he is cautious in the purchase of securities, not only scrutinizes the Board of Directors, but also looks at the research department of the corporation whose securities he anticipates buying. Today the Steinmetzes and the deForests are as important in corporation affairs as the Raskobs, the duPonts, and the Fishers. The real wealth of the modern corporation and the potentialities for enhancing its earnings are created in the laboratory.

In 1922 the Victor Talking Machine Company was faced with the growing menace of radio broadcasting. Talking machines became a drug on the market. In its troubles, the Victor company turned to the Western Electric asking for assistance. Then a new miracle was performed. Radio, which had struck the talking machine low, now revitalized it with an entirely new and improved method of sound reproduction. This new development and the increased earning power were immediately reflected in security prices.

Warner Brothers, motion picture producers, were on the verge of collapse when the Vitaphone was introduced and became an immense success. When the A. M. Byers Company developed an improved process of pipe manufacture, the price of Byers common stock immediately rose. Who can say what untold wealth has been added to the Eastman Kodak Company through its highly developed research department? Who can begin to determine what wealth Langmuir, with his improved vacuum tube, his nitrogen-filled lamp, or Steinmetz with his brilliant researches have added to the General Electric Company? Is it not significant that the greatest corporations today have the most alert research departments? The research department of General Motors occupies an enormous building in Detroit.

There never was a time when research merited the attention of the investor more than it does today. It both creates and destroys security values. The mortality of corporations that have become victims of organized research is appalling. The war for markets is won or lost in the research department. Investors,

then, must learn to sense scientific as well as business possibilities.

What will be the effect of the motor truck and motor car on railroad traffic? How importantly is the airplane going to figure in the future? What will be the ultimate influence of television on the moving picture business? What will the development of a cheaper and more reliable oil burner do to the coal industry? One has but to review these possibilities to realize that the factors which influence security values are growing more complex daily.

When the research laboratories of the duPont Company finally perfected lacquer, it not only added greatly to its earning power, but for the moment it adversely affected the earning power of the paint manufacturers producing enamels. This startling development caused a revolution almost overnight in the paint industry.

Twenty-five years ago there was little organized investigation. Research was conducted in private laboratories or at universities. The modern industrial research laboratory is largely a product of the last 15 years. Business men, once skeptical of the genius, now provide him with lavish support so that he can bring his ideas to perfection. He is even given ideas to perfect. It is not uncommon today for a Board of Directors to prepare a requisition for a new product and even to specify its necessary properties and characteristics — whether it be an electrical refrigerator or a substitute for insulin.

What ten years ago were considered purely academic researches are being applied industrially today. Little did Hertz or Hallwach think that their investigations into the photo-electric phenomena would some day be used in sorting cigars or indicating the amount of smoke passing up a chimney. Cottrell was quick to apply the laboratory experiment to the precipitation of solid matter from smoke, a development which has saved the big smelting companies millions of dollars.

The mass production of commodities has been brought about entirely through the researches of mechanical and electrical engineers. The five and ten cent store has been made possible through mass production brought about by better punch presses, faster looms and a thousand other developments. The chain store is simply a means of distributing cheaply the products of inventors and paid research workers. Commodities become antiquated quicker today than ever before. Change, revolution, and decay are the materials from which progress is made.

Don't Ask Me Another

Condensed from The New York Herald Tribune Magazine
(October 6, '29)

Donald Rose

Columnist; editorial writer; literary reviewer; after-dinner speaker

IT is no secret that we have children. At last accounting there were ten — and more coming, for all I know. We have found that the possession of children is one of the things which it is difficult to keep entirely a private matter, even in the most exclusive neighborhoods — which ours is not. We have a lot of children and everybody seems to know it. A glance at the rocking horse in the ditch, the baby coach on the front porch, or the wash on the line, seems to tell the story even to the casual observer. One look at our domestic display and the burglar and the income tax collector pass us by.

One sort of occasional visitor seems somehow to know that we love our children with a passionate devotion, and that we worry ourselves sick over their mental and cultural welfare. Mostly they are women and they sell books. They come for miles to seek us out, buried though we are in rural peace and poison ivy.

One day an apparently young and dangerously charming girl appeared at the door. She didn't look like a girl working her way through college. She looked just elegant.

"Are you Mr. Rose?" she asked.

"So help me, I am," said I.

"Mr. *Donald* Rose?" said she, evidently hardly believing her good fortune. "I want to talk to you about literature."

Right there she had me. I am by way of being a book reviewer on alternate Tuesdays, and I love to talk about literature to ladies. "Do come in," said I. "Have a chair, have a footstool, have a cigarette."

My wife signalled me ominously to the kitchen in sign language. "She's here to sell books," said she. "Throw her out."

"No," I said, "she is here to discuss literature; possibly to buy a book — one of the books I am going to write just as soon as I have a little time."

Feeling a little dampened, I returned to my guest. "I see that you have children," said she. That, I felt, was no great trick on her part. The baby was talking right there at the top of his voice in Chinese, Sylvia had just fallen down stairs, Frankie was chasing the cat with the fire shovel and a baseball had just come in the window.

"Yes," I agreed. "Do you want some?"

The question may not have been in the best of taste, and she ignored it. "I want to ask you a few questions. Why, for instance, is the snow white and why do the stars twinkle?"

"Ah, yes," I replied. "Why, indeed?"

"What makes a kettle boil? How many legs has a grasshopper? Why does a bee sting? Who owns the

Pennsylvania Railroad? Where is Kamchatka? Why do we sneeze, and what are eyebrows for? You can't tell me."

"Right," I said, "I can't."

"I knew it," she crowed triumphantly. "Then what do you do when these lovely little children ask these questions?"

"Well," I said, "what do you think I ought to do about it?"

"Look at this book." She produced one and began to tell me about it. She wasn't there more than an hour or so, though it seemed longer. I gathered that she was selling a 20-volume family Bible or something and that the price was from $24 up and a dollar down. Finally she went, blowing kisses to the children, and leaving me to realize that I had bought a Compendium of Children's Life, Light and Literature.

The evening after the books came we sat around, waiting eagerly for the children to ask what makes the sea salt. I kept my thumb in volume IX at page 318 with the answer all ready. We steered the conversation around skillfully to the seashore, and how the jolly old waves turn you upside down and fill you with salt water until you feel like a pickled herring, but nobody asked. We made a few remarks about the Dead Sea and salt mines and shipwrecked sailors dying of thirst in open boats. At last I became desperate. So I asked my oldest boy, "Son, do you know what makes the sea salty?"

"Sure," he replied. "It's the salt in it," and went to bed.

We gave up for that evening, but tried again in those that followed. We picked every night a likely question and tried to encourage our children to come running to us to ask it. Results were discouraging. It looked as though the books were due to spend their lives unopened on the shelves in company with the complete works of Scott and Lytton.

But one evening at supper the ice was broken. Little Jackie had been gorging his childish mind on a picture book of Bible stories. "Daddy," said he, "do angels wear halos all the time?"

"Why, yes," said I, not entirely certain of the facts; "I suppose they do."

"Well, then," said Jack, "what do they do when they go to bed?"

So we consulted the book. We found there were no halos in the index. We looked up heaven, and there wasn't a word about heaven in the whole 20 volumes.

Shortly thereafter my son asked why a mosquito has eight legs. This seemed important and I spent a lot of time tracking the mosquito through the book. He repeatedly evaded me, which is just the nature of mosquitoes. I thought I had him in Volume VII, but got involved in malaria and the history of the Panama Canal and the whole theory of antitoxins. It was not until I reached volume XVII that I finally cornered him. Even then I could find no reason why he has eight legs. I was bitterly disappointed, and even now that I have learned that a mosquito does not have eight legs and never did have, I do not feel a whole lot better.

And then there was Stanley, who is amazingly intelligent, which is one of those things that is not easy to

account for without dragging in a lot of distant relatives. "Daddy," he said, regarding the moon through the bedroom window, "is the moon a she or a him?"

What was I to do? Tell him I did not know and so shatter his childish confidence in my omniscience? Anything but that. "Just a minute, Sonny," said I. "I have to go down stairs for a moment, but I'll be right back and tell you," and I dashed down to the books. Did I find out? I did not. I found the moon all right, with a lot of nonsense about tides and temperatures and telescopes. But not a word about its gender. And, to make matters worse, in one place the book talked freely about the Queen of Heaven and in another about the Man in the Moon, as though the next door neighbor of the earth could change its gender like a pair of socks.

And so it goes. In spite of this wealth of information, the children consistently fail to ask the questions that are answered in the book.

But there are plenty of questions around the house that ought to be answered. And if someone will produce a book that will answer them, I'll buy it with my bottom dollar. Here are some of the questions it should answer:

1. Where are the children's nightgowns? I know they have about six nightgowns apiece, with a sprinkling of pajamas. But where *are* they?

2. Who broke the sugar bowl? You can't blame it on the cat, for the cat doesn't eat sugar, and besides, the cat died last spring. None of the children broke it, for they have told us so.

3. Who uses all the matches? This is probably my wife's favorite question.

4. How does it happen that we can buy a string of safety pins every time we pass a ten-cent store and still not have any? How do they affect a baby's digestion?

5. Why is the closet door in the living room always wide open when company calls? Why does everything from egg-beaters to old straw hats have to be put into that particular closet?

6. Whose turn is it to wash the dishes, it being clearly understood that it isn't mine?

7. Where are all the kitchen knives, the can-openers and the ice-pick?

8. Where are mother's best scissors, and who has been cutting sheet tin with them?

These are no more than a beginning, and anyone can think up a whole lot more. None of them are even considered in the Compendium. Right now we will exchange the whole 20 volumes for an equivalent bulk of detective stories or for a nutmeg grater in good working condition.

Nothing New Under the Sun?

NO longer need the disciple of Izaak Walton break his back digging worms. Select specimens, raised on an exclusive angle worm ranch and shipped to market in tin cans, are for sale. R. B. Bikolsky has already shipped eastward this year more than 300,000 angle worms from his ranch at Alhambra, Calif. A million more baby worms are being fattened on corn meal for next year's fishermen. — *The Business Week.*

One well-known razor company built up its large sale of blades partly through giving away razors. Now a leading camera concern plans to widen the use of its films through giving away 5,000,000 cameras to school children next spring. — *The Magazine of Wall Street.*

Another opportunity for the electrical industry — heating ladybugs. California orchardists and vegetable growers are menaced by an insect known as the mealy bug which destroys trees and plants. Ladybugs, it was discovered, live on mealy bugs, so ladybug culture is thriving and huge quantities of the insects are being made available to the farmers by 15 county citrus associations. Cabins have been built, carefully ventilated, and, because the ladybug demands warm, even temperature, electric heaters are used. California electric companies are rejoicing in a new "load." — *The Business Week.*

Did you know that, while every other nation in the world has been using the telegraph for a generation, the luckless Chinese haven't been able to wire even a New Year's greeting? And why not? Simply because Chinese is a picture-language, and you can't put it over into a Morse code — nor into any other. But now, all of a sudden, all is changed; and Asia moves ahead over night!

The Radio Corporation of America has just arranged with the Chinese Government to transmit messages in the original Chinese characters by telephotography. You know how our newspapers now telegraph photographs, and how our banks send signatures over the wire? Well, that is how friend John Chinaman will be shooting night-letters to his agent in Hankow commanding him to buy eight bales of hog bristles. . . . Conservative business men predict that the entire trade and politics of China will be revolutionized by this American invention within a few years. — *Walter B. Pitkin* in *The American Magazine.*

Maybe we shall soon be talking about the Cellulose crop. There are premonitory stirrings in the ranks of lumbermen suggestive of another one of those industrial "revolutions" that are turning the world into a merry-go-round. The chemical engineer is now saying to the lumberman: Take a big crop of small trees every ten or fifteen years instead of a small crop of big trees every hundred years — not of lumber, but of wood, cellulose. One responsive forester already visions gigantic mowing machines, drawn by super-tractors,

crunching through dense fields of young trees, even as the combine now cruises gaily across the wheat fields of Kansas. From the forest the wood goes to converters, comes out as cellulose — and, presently, the cellulose is made into 4000 commodities, everything from candy wrappers to synthetic lumber. Nothing is wasted, tree growing becomes profitably feasible; and the forest, capable of perpetual production, will relieve in many ways the pressure on the minerals which, once mined, are gone forever. — *The Magazine of Wall Street.*

The American Telephone and Telegraph Company is working out a national dialing system. Within a few years it will be possible to dial any leading center of the United States directly from the individual telephone instrument and obtain a number as quickly as the present dialing system permits intra-city connections. — *The Magazine of Wall Street.*

Thousands of miles of shallow streams, particularly in the South, may be opened up to commerce by the development of caterpillar type tugboats which can operate in two or three feet of water and haul huge loads of freight. A company in St. Louis recently placed the first fleet in operation on the Cumberland River. Other operations probably will be started soon.

The towboats have Diesel electric motors. The caterpillar drive on each side of the boat consists of chains with blades attached much as buckets are put on chain elevators.

Barges towed by the boats are like floating box cars. They are handled in fleets much as railcars are, and are coupled together similarly. Thus far the operation has been successful and a large amount of business has been picked up by the barges as they reach settlements never before visited by common carriers. There are thousands of miles of shallow waterways in the South which, when cleared of stumps and trees, can be opened to commerce by this new equipment. Its effect upon Southern development is likely to be great. — *The Business Week.*

The uses of the X-ray in industry are increasing steadily. Satisfactory photographs are now made through four inches of steel, six inches of aluminum and through other materials in proportion to their density. . . . Automobile tires are photographed to determine the condition of union between cord and rubber. Golf balls are X-rayed to inspect centering of the cores. The amount of tetra-ethyl lead in gasoline can quickly be determined by radiography. A few shoe stores have installed fluoroscopic units to show customers how shoes really fit. — *The Business Week.*

A stethoscope for listening to grape fruit has solved a fruit problem. Until recently there was no way of detecting the Mediterranean fruit fly in grape fruit without cutting the fruit open, thereby spoiling it. Since worms eat fruit by tearing off morsels, they make a noise in so doing, and if this sound is amplified by thermionic tubes (like those in radio) the sound of flies eating into fruit is audible. — *The Business Week.*

Wings Over America

IF you have a flier's license you can now rent an airplane in Kansas City from a "Drive-It-Yourself" company the same as an auto. This concern has ordered 100 two-seater "sport" model planes, making it possible for fliers who can't afford to own one, to "step out" in the classiest plane to be had. — *Mid-West Review.*

Recently those in charge of the Wright Flying School varied the usual advertising procedure for such institutions by conducting a campaign through farm magazines instead of the aëronautical publications. The returns, they say, have been a revelation, and have convinced them that the boys on the farms of America are the ones who are really looking to aviation as a future career. — *New York World.*

The Canadian Government is spending about $140,000 this year for the promotion of flying clubs. Most of this money will be spent on airplanes to be presented to the clubs. Flying club membership in the Dominion is now over 3400. — *Aero Digest.*

What is believed to be a world's record for a long drop with an unopened parachute was established recently over Chicago. Jack Cope, veteran pilot of Chicago, leaped from a plane flying 15,000 feet over the municipal airport and waited until he had fallen a distance estimated at 10,000 feet before he pulled the cord that opened his parachute. A short time before, Rex Harker had fallen freely for 9600 feet in performing a similar feat at Cincinnati.

In theory, at least, it is now known that there is no limit to the distance a jumper may safely fall. Army Air Corps experiments show that, contrary to previously accepted notions, a falling man quickly reaches a maximum velocity. Friction of the air then prevents him from falling faster than about 120 miles an hour, irrespective of the length of his drop.

The sensation of falling may be nothing but an optical illusion, if new tests are to be believed. Eight Army men recently leaped with parachutes from planes over San Antonio. None had ever made a parachute jump before. According to their instructions, they avoided looking at the ground or plane. At the conclusion of the experiment, all of them said they had no sensation of falling. — *Popular Science.*

Air taxi service to any point in North America at the rate of ten cents a mile will be provided by the Yellow Air-Cab Company when it opens its first station in Wichita. It is the intention of the company to establish Air-Cab stations in all large cities, with uniform rates throughout the country. — *Aero Digest.*

Colonial Air Transport has started an air express service between Boston and New York. The Western Union Telegraph Company will furnish messengers to deliver packages in the two cities making a four hour service. — *Airway Age.*

All the thrills of aviation are not reserved for pilots. Consider the recent experience of Lieutenant Ivonnet over Le Bourget Field, near Paris.

Ivonnet, a nonflyer, was in a plane as an observer. The pilot was stunting, and fell out while performing a difficult maneuver. He opened his parachute and dropped safely to earth. But Ivonnet had no parachute. He could only seize his side of the plane's dual controls and do what he thought best. He sailed over the ambulances and fire engines rushed onto the field to be ready for his descent, and crashed in a creek nearby. Luckily he escaped without a scratch — but he had experienced thrills enough for a lifetime.

The other day a British mechanic, who had never flown a plane in his life, took someone's dare and flew off alone with a big night bomber. He was gone for four hours and Royal Air Force planes went out to look for him or the wreckage. When he was sighted on his way back, they rushed fire apparatus to the landing field, expecting him to crash. But he made a safe landing, even if it was obviously inexpert. — *Popular Science.*

A pilot used to go out all buckled up like a warrior looking for battle. Now he is a professional man with his suit pressed. A transport pilot, hooded and belted, is beginning to look like a Don Quixote. There is now little more adventure in flying a transport plane than there is in running a street car. . . . When enough people are familiar with air travel, there will be no more mystery about it. We are rapidly approaching the day when there will be no more excitement about flying than there is about railroading. — *Aero Digest.*

The technique of landing machine guns and their crews from airplanes is being constantly improved. During a recent demonstration at San Antonio, Texas, two machine guns were dropped in parachutes and put into action by two crews of three men each, who descended from an airplane to the ground via the parachute route. Assembly of the machine guns and preparing them for firing was only a matter of a few moments. — *New York Times.*

Football fans are turning to the air as a solution of the traffic problem to such an extent that the Colonial Airways company will run a special service to Cambridge, New Haven and other points during the football season. . . . Business men traveling to Boston may go in a flying office, if they wish, and dictate correspondence or reports en route. One of the planes on the New York-Boston line of Colonial Airways has been fitted with a dictaphone for the use of patrons of the line. — *N. Y. Herald Tribune.*

A recent significant development in aviation was the formation of the Dornier Aircraft Corporation of America by the General Motors Corporation and the Fokker Aircraft Corporation — in which General Motors has practical control — acting with the German interests behind the Dornier flying boats. Coming as it did immediately after the extraordinary feat of the giant Dornier Do-X in putting in the shade the world's air passenger record by flying for an hour with 169 passengers, the announcement confirms the trend, already indicated, toward larger types for transport use. — *New York Times.*

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